EP-01

A Case of Pulmonary Adenocarcinoma With Two EGFR Mutations and Metastasis to Cervix

Serkan Akın

Department of Medical Oncology, Recep Tayyip Erdogan University, Rize

Sixty-six-year-old female patient had undergone thoracolumbar MRI due to the pain in the lower back that has been ongoing for 2 months. MRI revealed metastatic lesions in the vertebral bodies T3 and L3. The patient had dyspnea for the past month. The chest X-ray revealed a mass in the left lung. A PET-CT was performed on the patient who was referred to the Oncology outpatient clinic due to the suspicion of malignancy upon her complaints of ongoing vaginal bleeding for the last few months. In PET, 46x31 mm (SUVmax: 8) hypermetabolic lesion at the left lower lobe, mediastinal, left hilar hypermetabolic lymph nodes, right adrenal metastasis, millimetric metastatic nodules in bilateral lung, 28x23 mm (SUVmax: 17.6, second primary?) soft tissue density at the cervix, and lytic-sclerotic metastases in the skeletal system, at the T3 and L3 vertebrae, left iliac and left pubic bone, were detected. Biopsies of the lung and cervix were obtained from the patient who was suspected to have two primaries. The lung biopsy of the patient was primary adenocarcinoma and the cervix biopsy was compatible with pulmonary adenocarcinoma that metastasized to cervix. No metastasis was detected in the brain MRI. Bisphosphonate therapy was initiated for the bone metastases. During the molecular analysis, palliative radiotherapy was planned for T3 and L3 vertebrae. The result of the molecular analysis showed that the patient had two different EGFR mutations, exon 21 L858R and exon 20 T790M. Erlotinib treatment was initiated. Osimertinib treatment was reserved for progression. The patient was seen 2 weeks after starting erlotinib. There was a significant decrease in her pain and dyspnea. A decrease was detected in the initially observed tumor markers. Two weeks later, severe progression was detected in PET scan. Multiple cranial metastases were detected in the patient, who had severe and persistent nausea and vomiting. While osimertinib treatment was going to be initiated, cranium progression developed rapidly and the patient was lost.

Keywords: EGFR mutation, cervical metastasis, pulmonary adenocarcinoma.

EP-02

Synchronous Adenocarcinoma of the Colon Adenocarcinoma and Pulmonary Adenocarcinoma: Case Report

Yasin Emrah Soylu,[1] Mehmet Naci Aldemir[2]

[1]Department of Internal Medicine, Erzincan University Mengucek Gazi Training and Research Hospital, Erzincan; [2]Department of Internal Medicine, Erzincan University Mengucek Gazi Training and Research Hospital, Medical Oncology Department, Erzincan

Introduction: Two or more primary tumors diagnosed within the first 6 months after the diagnosis of the first primary tumor are defined as synchronous tumors. Metachronous tumors are tumors that have been diagnosed in the period after 6 months from the diagnosis of the first primary tumor. The incidence of synchronous colorectal cancers are between 2.3-12.4%. The incidence of synchronous lung cancers is 0.1-1.6%.

Case: The 60-year old male patient presented with complaints of constipation and abdominal distention. The patient had a history of smoking with 30 packs/year. In the colonoscopy performed in June 2017, an ulcerovegetan mass surrounding the lumen at the distal sigmoid colon was observed and biopsy was performed. The pathology result was sigmoid colon adenocarcinoma. The patient's thoracic-abdominal CT revealed a lesion in the anterior segment of the upper lobe of the right lung, which was initially considered as metastasis. A mass with malignant appearance was observed, extending about 9 cm from the rectosigmoid junction (Fig. 1). The patient underwent left hemicolectomy in July 2017. The pathology was moderately differentiated sigmoid colon adenocarcinoma. In August 2017, a Wedge resection for the lung mass was performed. The pathology report indicated solid dominant type adenocarcinoma. The findings were compatible with primary lung adenocarcinoma. Patient was diagnosed with synchronous stage 2 colon adenocarcinoma (T3N0Mx) and stage 1 lung adenocarcinoma (T1N0Mx). For lung carcinoma, the patient was followed up, and for colon carcinoma, adjuvant Capecitabine treatment was prescribed. The treatment of the patient was completed in February 2018.

Discussion: Performing metastasectomy in patients with metastatic colon cancer who are fit to be operated contributes to the overall survival of the patient. As in our patient, it should be considered that the lesion, which is considered as metastasis in the images, may be a synchronous malignancy. Since synchronous cancer prognosis is similar to the single cancer prognosis, in patients who are pathologically at an early stage and fit to undergo resection, patients fit for operation must be evaluated for resection.

Keywords: Colon cancer, lung cancer, synchronous tumor.

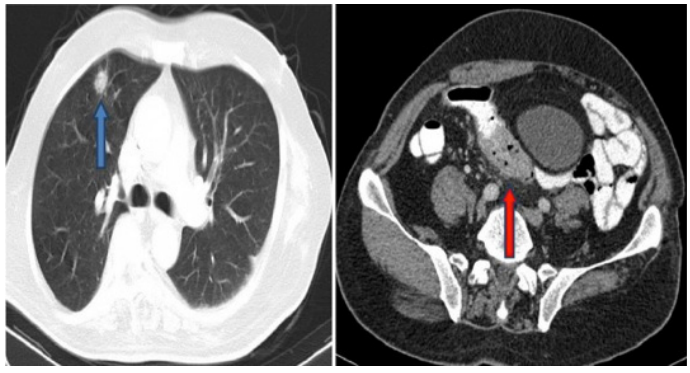


Figure 1. Resected specimen: the gallbladder and the bile duct cyst.

EP-03

Long-Term Survival with Targeted Treatments in the Patient with Metastatic Renal Cell Carcinoma: A Case Report

Melih Simsek, Mehmet Bilici, Salim Başol Tekin

Department of Internal Medicine and Medical Oncology, Ataturk University, Erzurum

Renal cell carcinoma constitutes 2-3% of all adult cancers. It is responsible for 90% of the kidney cancers. 5-year survival rate is around 90% in the local disease, whereas it can be down to 10% in advanced stage disease. Lung, lymph nodes, bone, liver, adrenal gland and brain are the most common sites of metastasis. With targeted therapies such as interleukin, interferon, tyrosine kinase inhibitors, and finally, immune checkpoint inhibitors, longer survival rates are being achieved in metastatic renal cell carcinoma. Our aim is to present a case in which we achieved long-term survival with these targeted therapies. The patient underwent radical nephrectomy at the age of 64 in March 2010, due to a mass lesion in the left kidney. The pathology of the mass was reported as clear cell kidney carcinoma. Interferon-alpha2b treatment was initiated for the patient who had lung metastasis in PET-CT in June 2010. The patient tolerated this treatment poorly and thus sunitinib treatment was initiated in July 2010. After the progression of lung metastases was detected in November 2013, 10 mg everolimus treatment was initiated, and continued until September 2016. Axitinib treatment was initiated since metastasis at the right adrenal gland was detected in addition to the progression of lung metastases. After observing progression again in July 2017, nivolumab treatment was initiated with patient's consent for off-label use. After three cycles, the patient had partial response and in subsequent evaluations, the patient remained stable. The patient who received the 9th cycle as the last cycle was found to have a stable response in the evaluation on June 2018, and the treatment was extended. Our patient was diagnosed in March 2010 and developed metastatic disease in June 2010. The 8-year survival was achieved in our patient, who was treated with targeted agents, and the treatment still continues. We believe that patients with renal cell carcinoma will have better survival times with new agents and combination therapies.

Keywords: Metastatic disease, nivolumab, renal cell carcinoma.

EP-04

Vitiligo in Metastatic Malignant Melanoma Patient and its Correlation with Response to Therapy

Fatma Aydoğan

Sisli Etfal Training and Research Hospital, Istanbul

The prevalence of vitiligo in the general population ranges from 0.5% to 1%. Vitiligo associated with malignant melanoma has been reported to increase 7-10 times compared to the general population. Hypopigmentation observed in malignant melanoma is called vitiligo-like lesions. Although the immunopathogenesis of vitiligo is not fully understood, in malignant melanoma, it has prognostic value, as well as predictive value combined with the immunomodulatory treatments. A similar correlation has not yet been shown with temozolamide therapy.

In the case we present here, we showed good treatment response and prolonged survival in a patient with metastatic malignant melanoma who developed vitiligo-like skin lesions under temozolamide therapy. Forty-two-year-old male patient presented with a mass in the back of his head which has been rapidly growing for the last three months. On physical examination; a 5 cm solid mass at the left occipital region and multiple left cervical lymph nodes were detected. Histological diagnosis was compatible with malignant melanoma. In PET-CT; left occipital mass, multiple left cervical lymph nodes and multiple metastatic lung nodules were detected. BRAF mutation analysis showed that BRAF was wild-type. Temozolamide treatment was started as 200mg / m2, 5 days, 28 day cycle. Two months after treatment; shrinkage in the mass, vitiligo-like lesions on the neck and face, partial response in PET-CT were observed, and after nine months, a complete response was observed. Fourteen months later, a new single lesion was seen in the liver and ipilumimab was started after radiofrequency ablation therapy. The patient is still stable and being followed up.

In conclusion, physicians who treat metastatic malignant melanoma with temozolamide should be careful about the development of vitiligo-like lesions because they may predict the good response to treatment.

Keywords: Malignant, melanoma, vitiligo.

EP-05

Giant Mass in the Abdomen, a Case of Malignant PEComa

Ferhat Ferhatoğlu, Pınar Saip, Naziye Ak, Esra Aydın

Istanbul University Oncology Institute, Istanbul

Introduction: PEComa (malignant perivascular epithelioid mesenchymal cell neoplasia) is one of the rare soft tissue tumors of unknown origin that express melanocytic and smooth muscle markers. We wanted to share the PEComa diagnosis for the patient presenting with giant mass in the abdomen, and the pathophysiology of the disease.

Case: A 82-year-old female patient had a large mass with cystic, necrotic and bleeding lesions, with a diameter of 11 cm at the abdominal midline and 2 cm at the 6th and 8th segments of the liver. The pathological examination following the mass resection was evaluated as malignant PEComa. Four months later, when two new foci with a diameter of 1.5 cm at the 6th and 8th segments of the liver were detected in the abdominal MRI, the patient was referred to our center. Everolimus 10 mg/day was initiated, and the patient is being followed up for the last 9 months without any recurrences.

Discussion: Perivascular Epithelioid Cell (PEC) Angiomyolipoma (AML), Clear-cell "sugar" tumor (CCST), Clear cell myomelanostic tumor (CCMT), is a type of cell defined in a particular family of mesenchymal tumors involving rare clear cell tumors of other anatomical regions. They also express melanocytic markers such as HMB45, MelanA, as well as smooth muscle markers such as actin and desmin. Their malignant potential increases as the diameter, nuclear grade and mitotic index increase. The normal cell of origin in the body for perivascular epithelial cells is not known, and there are hypothetical approaches to this. The most important pathogenesis is the differentiation and proliferation cascade caused by the loss of TSC2. With its GTPase activity, tuberous sclerosis complex has an inhibitory effect on mTOR. Loss of TSC-2 causes the cell to acquire proliferative and anti-apoptotic properties by eliminating this inhibition. Although there are no standardized treatments, the use of mTOR inhibitors is becoming increasingly widespread based on the pathogenesis and due to the significant response rates in tuberous sclerosis.

Keywords: Everolimus, PEComa, TSC.

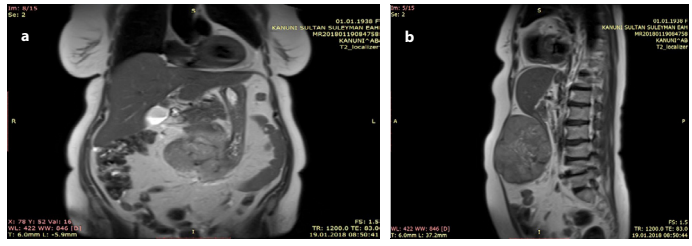


Figure 1. (a) Coronal Image of Giant Mass in the Abdominal Midline. (b) Sagittal Image of Giant Mass in the Abdominal Midline

EP-06

Nivolumab: Can the Same Activity be Achieved at Different Doses?

Naziye Ak, Adnan Aydıner

Department of Oncology, Istanbul University, Istanbul

Introduction: There is currently no active screening program in our country for lung cancer, patients are usually diagnosed at local advanced and metastatic stages. Considering the limited efficacy of the current treatment options, it is a disease in which advanced 5-year survival is as low as 10%.

Case Presentation: A 48-year-old non-smoker patient with no known diseases consulted the physician due to fatigue in December 2017. In the thoracic tomography requested upon detecting a nodule at the right lung lower lobe in the PA chest X-ray, lobulated contoured nodule with 16 mm diameter at the superior segment of the right lung lower lobe and milimetric mediastinal lymph nodes were observed. The pathology of the patient, who was operated because the PET-CT negative mediastinal nodes, was adenocarcinoma with 100% solid pattern, with 16 mm tumor diameter, lymphatic invasion and pleural invasion. Isolated 11R metastasis was detected upon mediastinal dissection. As a result of multidisciplinary evaluation, adjuvant 4-course cisplatin/Vinorelbin chemotherapy and radiotherapy were indicated. After 2 cycles, local recurrence and right inguinal newly developed lymph nodes were detected. The tru-cut biopsy of the lymph nodes showed TTF-1 positive and was compatible with adenocarcinoma metastasis. Molecular evaluations of EGFR were normal, ALK and ROS-1 were negative, and tumor PDL-1 level was 95%. The patient was given Nivolumab 480 mg every 4 weeks. PET-CT performed at the 3rd cycle showed a complete response. In the imaging, newly developing thyroiditis was also detected. The patient is asymptomatic and the treatment still continues.

Conclusion: Given the mean half-life of nivolumab, which is 25 days, it may be considered that for certain groups of patients, a dose of 480 mg every 4 weeks (or longer) may preserve therapeutic Nivolumab concentrations, which may reduce drug costs. In cases of drug-related repayment problems, treatment with a lower dose should be considered as an option.

Keywords: Immunotherapy, nivolumab, PD-1, non-small cell lung carcinoma.

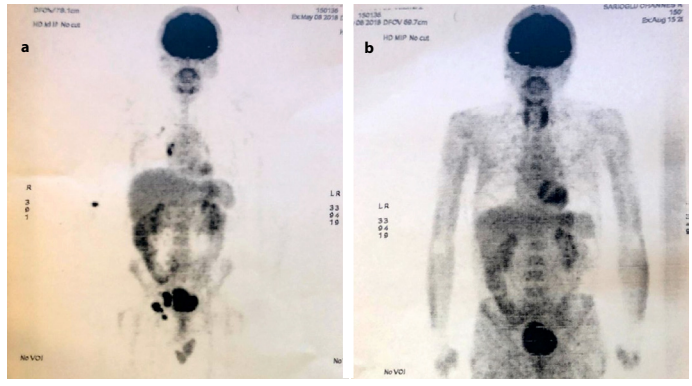


Figure 1. (a) Pre-treatment: PET Image Before Treatment. (b) Post-treatment: PET Image After Treatment

EP-07

A Case of Hyperlipidemia in a Patient Receiving Chemotherapy with the Diagnosis of Rectum Ca

Meral Sayın

Department of Radiation Oncology, Health Sciences University Ankara Training and Research Hospital, Ankara

Thirty seven-year-old male patient presenting with complaints of constipation and rectal bleeding was operated in August 2008 upon being diagnosed with rectal cancer. FOLFOX 4 (Oxaliplatin +5-FU-FA) and RT plan were applied to the patient who was considered as stage 3 according to the pathology result. Blood examinations and scans for distant metastases performed preoperatively and pre-CT scan were normal. The patient received RT after 2 cycles of CT. The patient received 3rd and 4th cycles together with the RT (as 5-FU-FA alone) as concomitant chemoradiotherapy. After RT, CT was continued with FOLFOX 4.

Results: Triglycerides, cholesterol and LDL levels were elevated in the biochemical tests performed at the time of patient's 6th cycle. The patient started dieting but due to the persistent increase in blood fat levels, the patient was prescribed with antilipid medication. The patient's lipid levels are shown in the table below (1). Before CT (September 2008) 6th cycle of his 2nd CT (December 2008) 8th cycle of his 3rd CT (January 2009) 10th cycle of his 4th CT (February 2009) 5th One week after the initiation of antilipid medication (March 2009) 6th February 2014 TABLE: 1 2 3 4 5 6 HDL 45 28 30 21 29 36 LDL 111 305 400 over 400 over 400 over 143 Cholesterol 121 202 198 253 141 200 TG 187 348 388 1386 503 413 During the chemotherapy of the patient, there was no problem except hyperlipidemia and hypercholesterolemia. The medication (lipid and cholesterol) still continues.

Discussion: Giventhe side effects associated with antineoplastic drugs, none of the drugs the patient uses have such side effects (1). Side effects such as hyperlipidemia were observed with certain drugs (i.e. capecitabine) in the literature, but no such side effects have been indicated for oxaliplatin, 5-Flurourasil or Folinic acid (2) (3).

Keywords: Chemotherapy, hyperlipidemia, rectal cancer

Table 1. LIPID Levels

	1	2	3	4	5	6
HDL	45	28	30	21	29	36
LDL	111	305	OVER 400	OVER 400	OVER 400	143
CHOLEST	121	202	198	253	141	200
TG	187	348	388	1386	503	413

EP-08

Synchronized RCC, Stomach GIST, and Squamous Cell Carcinoma of the Lung

Elanur Karaman, Celal Alandağ, Elif Merev, Halil Kavgacı

Department of Medical Oncology, Karadeniz Technical University Faculty of Medicine, Trabzon

Introduction: Synchronous tumors in which the tumors are detected at the same or within a very short time interval are rare, and detection of three tumors at the same time is very rare. The etiology of multiple tumors is complex; it can be associated with genetic, environmental, hormonal, medical-related, and sex-specific factors. Our case, in which RCC, GIST, and lung SCC tumors were detected synchronously, is presented as it is a very rare case.

Case: In a 73 year old male patient, abdominal MRI performed due to abdominal pain revealed 11x7 mm lesion in the 7th segment of the liver, 67x51 mm mass between the stomach and liver with borders indistinguishable from the gastric wall (GIST?, metastasis?) and 2 masses, the large one being 67x42 mm, at the left kidney region (Figs. 1, 2). In thoracic CT, the right hilar LAPs with the large one being 22x15 mm, and a 41x47 mm mass at superior segment of the the right lung lower lobe were detected (Fig. 3). Left renal mass, gastric wedge resection and liver metastasectomy were performed on the symptomatic patient. Left nephrectomy mass resection material; 2.5x2 cm, Fuhrman Grade-1 clear cell renal cell carcinoma, gastric resection material; 7x5x4 cm, spindle cell gastrointestinal stromal tumor, mitotic rate: 2/5mm^2 c-Kit (-), Ki-67 index was 5%, surgical margins were intact and liver resection specimen was reported as subcapsular hyalinized nodule. Lymph node dissection of the mass at the right lung revealed squamous cell carcinoma (SCC) metastasis. No distant metastasis was detected in the patient's PET-CT. Brain MRI was normal. Adjuvant therapy for RCC and GIST was not considered for the patient in the low-risk group, and curative chemoradiotherapy was planned for lung SCC. Genetic mutation analysis was performed for the patient with multiple tumors.

Conclusion: Coexistence of transparent cell RCC and GIST is very rare. In patients with primary malignancy, the possibility of a synchronous tumor should be kept in mind, all suspicious lesions should be biopsied.

Keywords: Gastrointestinal stromal tumor, renal cell carcinoma, synchronous tumor, squamous cell carcinoma of the lung.

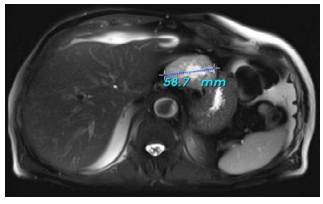


Figure 1. Abdominal MRI: Between the stomach and liver, mass lesion of 67x51 mm, whose borders are indistinguishable from the gastric wall, metastatic mass and cyst are observed

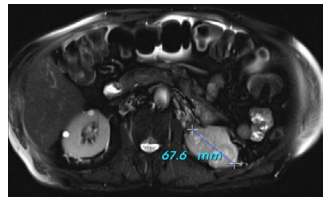


Figure 2. Abdominal MRI: Two mass lesions at the left kidney with heterogeneous enhancement, the large one being 67x42 mm

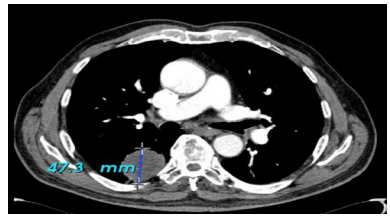


Figure 3. Thoracic CT: Pleural mass of 41x47 mm at the superior segment of the right lung lower lobe

EP-09

Extended Survival with Lapatinib and Capecitabine in the Patient Diagnosed with Trastuzumab-Resistant Metastatic Breast Cancer

Mustafa Değirmenci

Department of Medical Oncology, Health Sciences University İzmir Tepecik Training and Research Hospital, Izmir

A 55-year-old female patient was admitted to our clinic on August 2011, with a complaint of mass located at the bilateral breast. On physical examination, malignant mass of 1 cm diameter at the 2 o'clock position on the left breast, and a malignant mass of 2 cm diameter at the 2 o'clock position on the right breast were detected. Bilateral breast prophylactic mastectomy and axillary dissection were performed since the results of the breast biopsies revealed that the masses were malignant. Based on the pathology results after the operation, the patient was diagnosed with stage 2 bilateral invasive ductal breast cancer. Breast pathology revealed hormone positive, cerb2 +++ staining. Distant organ metastasis was not detected in radiological examinations. After bilateral prophylactic breast surgery, the patient was prescribed with adjuvant chemotherapy (4AC + 4 docetaxel) and trastuzumab treatment. After chemotherapy is completed, adjuvant trastuzumab treatment was continued upto 1 year. The patient received the final trastuzumab treatment on

December 20, 2012. In addition, after the chemotherapy, hormonotherapy (anastrozole) was initiated. In March 2013, upon detection of extensive bone metastases and lung metastases in radiological tests, the cancer was considered as trastuzumab-resistant and lapatinib + capecitabine treatment was initiated. In the follow-ups, partial response was observed. In the 5th year of her treatment, the patient had complaints of cough and in the PET/CT performed on 31.10.2017, progression in the mediastinal metastases were observed. Second line trastuzumab-emtansine treatment was initiated. In response, the disease was stabilized. Since the patient had headaches after the 9th cycle, in the brain MR and PET/CT performed on 03.08.2018, brain metastases were detected. The patient received palliative cranial radiotherapy. Third line trastuzumab + chemotherapy was planned for the patient.

Keywords: Lapatinib, metastatic breast cancer, survival.

EP-10

A Case of Hepatocellular Carcinoma with Long Term Response with Regorafenib and Transarterial Chemoembolization: Case Report

Nail Özhan, Umut Çakıroğlu, Gamze Gököz Doğu,

Serkan Değirmencioğlu, Atike Gökçen Demiray, Arzu Yaren

Department of Medical Oncology, Pamukkale University Faculty of Medicine, Denizli, Turkey

Objective: In 2017, regorafenib was approved in patients with progressing hepatocellular carcinoma following sorafenib treatment. In this study, we aimed to present a case in which we achieved long term response with regorafenib and transarterial chemoembolization treatment.

Results: A 68-year-old male patient diagnosed with hepatitis c had left hepatic lobectomy in May, 2013, upon the detection of nodular lesions in segments 4-5 and 7 of the liver at abdominal MRI. Radiofrequency tumor ablation was applied to the residual mass. He was diagnosed with hepatocellular carcinoma. Upon progressive increase in afp during the follow-up, sorafenib treatment was initiated.Between 2013 and 2015, a stable response was achieved with a dose of 400 mg/day sorafenib. In 2016, radioembolization was performed, as afp progression was observed and multiple hcc foci in the right lobe was detected in the abdominal MR. During the follow-up, after being stable for a while, afp continued to be elevated once more. Sorafenib dose was increased to 400 mg/day, but no response was observed. The patient was started on regorafenib on August 10th, 2017, when his AFP levels increased to 909. At the two-week follow-up, his afp was 795 and at the first month follow-up, his afp was 1065. After the increase in AFP values, TAKE procedure was performed on 26.09.2017. Following TAKE, AFP decreased to 329 at the first month follow-up. However, it elevated back to 565 at the second month follow-up. Due to the patient intolerance, 80 mg/day regorafenib dose was increased to 160 mg/day with close follow-up due to the progression in afp levels. After the dose increase, the AFP levels decreased to 194, 73 and 11 in the subsequent monthly follow-ups, respectively.

Conclusion: In our case, in the patient with progression after sorafenib, 1 year disease-free survival was obtained with regorafenib and TAKE combination. Our patient continues to receive regorafenib at 160 mg/day without any grade 3-4 side effects, and the disease is stabilized. Regorafenib appears to be an effective agent in the treatment of patients after sorafenib.

Keywords: Hepatocellular carcinoma, regorafenib, sorafenib.

EP-11

Adult Onset Langerhans Cell Histiocytosis Originating From Thyroid Gland: Case Report

Fatih Teker,[1] Umut Elboğa,[2] Burak Erbağcı[3]

[1]Department of Medical Oncology of Gaziantep, Gaziantep; [2]Department of Nuclear Medicine of Gaziantep, Gaziantep; [3]Internal Medicine of Gaziantep University, Gaziantep

Objective: Langerhans Cell Histiocytosis (LCH) is a common disease characterized by abnormal proliferation of myelodendritic cells of bone marrow within the age range of childhood. Exophthalmus, diabetes insipitus, bone lesions form its classic triad. Skin, bone, lung, pituitary and lymph node uptakeis common. The incidence of thyroid gland uptakeis quite rare even in multisystemic disease; therefore it was found appropriate for the case report.

Results: Our case was a 41-year-old female patient who was applied to the hospital due to swelling on her neck in 2007 and TFAB wass administered to her. Langerhans cell histiocytosis accompanying with Hashimoto thyroiditis was detected. Then total thyroidectomy was administered. Relapse was detected in the parotid gland 11 years after the operation. Prednisolone+vinblastin induction chemotherapy was launched for the patient after hypermetabolic views were seen in the parotid gland submandibular lymph nodes, liver and mediastinal lymph nodes on PET for the patient.

Conclusion: Langerhans Cell Histiocytosis is rarely seen in all age groups, but it is most common in children between the age range of 1-3 years. The uptake of the thyroid gland is quite rare even in multisystemic disease. The treatments which have been applied to the patients with LCH are antibiotics, steroids, radiotherapy, surgery and chemotherapeutics. Rate of response to chemotherapy is good in general. The patients with systemic disease were randomized for them to 24-week-etoposide (150 mg/m^2 iv, once in 3 weeks, for 3 days) or vinblastine (6mg/m^2 iv, once a week) in the first radomized study, LCH1, in terms of treatment. Initially, high-doseof methylprednisolone (30 mg/kg/day for 3 days) was given to both groups. No difference was found in PFS and OS between the two groups. It has been shown that the response achieved in the initial evaluation (in the 6. or 12. week) is an important prognostic factor after the treatment is launched in more recent studies.

Keywords: Langerhans cell histiocytosis, LHH, thyroid.

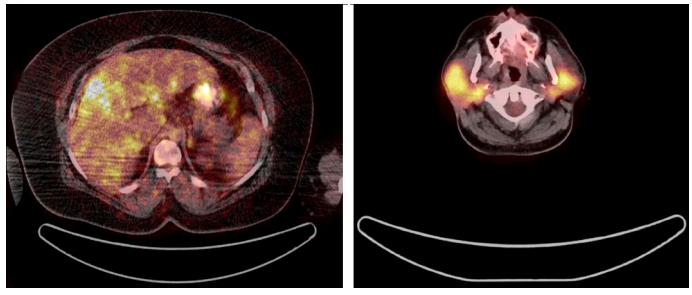


Figure 1. PET/CT

EP-12

Acute Myocardial Infarction After Chemotherapy in a Young Patient Diagnosed with Testicular Cancer: Case Report

Nihal Polat,[1] Mehmet Naci Aldemir[2]

[1]Department of Internal Medicine, Erzincan Binali Yildirim University Faculty of Medicine, Erzincan; [2]Department of Medical Oncology and Internal Medicine, Erzincan Binali Yildirim University Faculty of Medicine, Erzincan

Introduction: Testicular cancer is the most common cancer among men at the age between 15-35 years. 95% of all testicular cancers are with germ cells. Systematic randomized studies have shown that combination chemotherapy with cisplatin, etoposide and bleomycin (BEP) forms the basis of treatment. There is a progression risk of complications such as secondary leukemia, treatment-associated solid tumor, nephrotoxicity, neurotoxicity, ototoxicity, infertility, myelosuppression, pulmonary and vascular toxicity in this combination therapy.

Case: A 31-year-old male patient underwent left orchiectomy due to a mass in the left testicle. His pathology was malignant mixed germ cell tumor. Hypermetabolic lesions that might be associated with the metastasis in the left lung upper lobe, in mediastinum in lower left paratrekeal region and on the right external iliac level of the pelvis were found in his PET-CT imaging Cisplatin, etoposide and bleomycin (BEP) protocol was launched for the patient. He applied to the emergency service due to the complaint of astringent pain on the left side of his chest in the evening, after he received 2. cure D8 bleomycin treatment. Coronary angiography was carried out due to a typical chest pain in the patient

whose cardiac enzymes and ECG values were normal. Left main coronary artery, circumflex coronary artery and right coronary artery were observed as normal; a thrombus 100% obstructing the lumen of the left anterior descending coronary artery (LAD) was observed in the coronary angiography. Stent was placed in the LAD. The patient's general condition was good after the angiography and he was discharged after medical treatment was organized.

Discussion: Most of the patients with testicular tumors in whom acute myocardial infarction progressed were receiving both bleomycin and cisplatin treatment when the cases in the literate were taken into consideration. We think that myocardial infarction in our case was caused by bleomycin because it progressed 3 days after cisplatin treatment and on the day when he received bleomycin treatment. However, further studies should be carried out in order to demonstrate which chemotherapeutics and predisposing factors cause thrombotic complications.

Keywords: Bleomycin, cisplatine, etoposide, myocardial infarction, testicular cancer.

EP-13

Case Report of Multiple Primary Malign Neoplasia Which is Metastatic Malignant Melanoma, Larynx, Lung, Thyroid Cancer

Erkan Kayıkçıoğlu,[1] Eser Uyanık,[1] Asım Armağan Aydın[2]

[1]Recep Tayyip Erdogan University, Rize Training and Research Hospital, Rize; [2]University of Health Sciences, Antalya Training and Research Hospital, Antalya

We aimed to present a case of Larynx SCC, Thyroid papillary CA, Tongue root malignant melanoma and Lung adeno CA in a patient in this case report. The patient, who applied to hospital due to the complaint of hoarseness and shortness of breath, who was operated due to laryngeal SCC+thyroid papillary ca and who received Radiotherapy applied to our outpatient clinic for control and follow-up. It was learnt that the patient underwent total laryngectomy and left radical neck dissection as well as thyroid right lobectomy operation due to laryngeal cancer and thyroid nodules detected following this cancer seven years ago, the removed material was reported as larynx scc and thyroid papilliary cs in the pathologic examination, her/his stage was determined as T4aN0M0 and raditherapy was applied after the operation in patient's history. Pathologic PDG uptake was available on tongue root in FDG PET-CT which was taken due to metastasis-suspicious nodular lesions in the Lung in investigations of the patient. In addition, a primary-characterized lesion with recently progressed FSG uptake was detected in lung which had progressed stabil, together with nodule in non-pathologic character. A total glossectomy was applied to the patient and it was reported as malign melanoma. Two primaries on separate focuses were interpreted as adenocarcinoma and malign melanoma metastasis in the wedge resection performed in lungs. The patient was diagnosed with metastatic malign melanoma and temozolomide was was prescribed. The progression of the second primary tumors are associated with the effect of several risk factors such as the effect of many risk factors such as immunological deficiencies, genetic expression and/or hereditary defect in tumor suppressor genes, cigarette smoking, old age, diet and occupational exposure of the patient apart from the treatment method applied. It should be considered that the second primary tumors may frequently occur after larynx cancer, patients with laryngeal cancer should be regular followed-up. Diagnosis at early stage positively affects the patient's life.

Keywords: Larynx cancer, lung cancer, malignant melanoma.

EP-14

A Case Report of Atypical Hand Skin Rash under ALK Inhibitor, Alectinib

Arif Hakan Önder, Banu Öztürk

Department of Medical Oncology, Health Sciences University Antalya Training and Research Hospital, Antalya

Introduction: Alektinib has been approved for the treatment of patients with ALK rearrangement positive advanced non-small cell lung cancer. Any serious skin rash induced by alectinib has not been reported when compared to skin rash induced by epithelial growth factor receptor tyrosine kinase inhibitors (EGFR-TKIs) in terms of its side effects. In this case report, we would like to report that atypical a 62-year-old female patient with ALK-positive lung adenocarcinoma who developed atypical skin rashes on her palms due to first dose Alectinib treatment launched after she had disease progression after first-line chemotherapy.

Case: 62-year-old female patient who had not any smoking history applied to Antalya ERH in December, 2017 due to the complaint of cough. Bone mestastatic Stage 4 (T3N2M1) was accepted as Lung adenocarcinoma as a result of investigations and sample. Cisplatin and Pemetrexed chemotherapy was launched for the patient. Alectinib was prescribed due to the fact that ALK test which had been reviewed before was positive after SSS metastasis occured while the patient who was stabil intermediate examinations was being followed-up through pemetrexed maintenance after 8-cure-chemotherapy. Skin rashes, which were nowhere on her body, like hand-foot syndrome progressed on her palms after the patient used Alectinib for two weeks. The skin rash was associated with the medicine, after the patient discountinued to use the medicine on her own few days later and the skin rashes regressed. The current treatment of the patient continued and skin rashes gradually dissappeared and it was considered that this situation occured due to oral desensitization. The response of the patient to the treatment is now being followed-up as stabil disease under the SSS control.

Conclusion: We would like to share our case with skin rash on hands which rarely occur together with Alectinib in this report. The skin rashes dissappeared after a short break from the treatment, but we insisted that the treatment shall continue. Skin rashes were seen to decrease due to oral desensitization even if they reappeared.

Keywords: Alectinib, oral desensitization, palmar rash, progression.

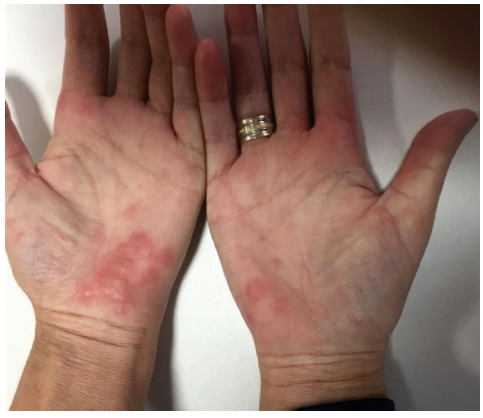


Figure 1. Palmar rash under the alectinib

EP-15

Small cell carcinoma of the cervix: A rare case

Tolga Köşeci,[1] Esmehen Pehlivan[2]

[1]Department of Medical Oncology, Hatay State Hospital, Hatay; [2]Department of Pathology, Hatay State Hospital, Hatay

Cervix cancer has some histopathologic subclasses and is the most common histologic type of squamous-cell carcinoma. Adenocarcinoma and its variants are observed at the rate of 20%. Small-cell-cervix cancer constitutes almost 2% of the cases. Patients generally apply due to complaints such as vaginal bleeding and pelvic pain. Surgery, radiotherapy or chemotherapy treatment options can be applied based on the stage of the disease in the treatment. We aimed to present our case who applied due to the complaint of postmenopausal vaginal bleeding, in whom mass of lesion was detected in cervix and who was diagnosed with small-cell carcinoma after biopsy.

Keywords: Cervix, small cell carcinoma, vaginal bleeding

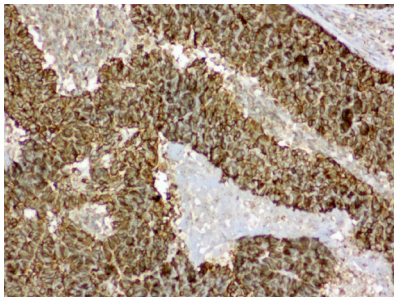


Figure 1. Synaptophysin CD56 and positive staining via neurospecific enolase was observed in the evaluations which were immunohistochemically conducted

EP-16

A Case Report of Lung Adenocarcinoma as the 2. Primary in a Patient with Mallign Melanoma Using Pembrolizuma

Mehmet Salim Demir, Esin Oktay

Adnan Menderese University Faculty of Medicine, Aydın

Objective: The incidence of malignant melanoma increases worldwide due to sunlight exposure, especially in light-skinned people. Malignant melanoma is reason of deaths in 90% of skin cancer and is caused by melanocytes producing pigment in skin. It can also be seen in other organs other than skin. Lung adenocarcinoma originates from the cells excreting mucous in the lung and constitutes almost 40% of all lung cancers as well as its incidence gradually increases. It is the most common subtype of lung cancer in individuals who smoke or do not smoke especially in young and female individuals. The fact that both of these disease concur is a quite rare case and we will present a case with lung adenocarcinoma as the 2nd primary in a patient with malignant melanoma who was prescribed pembrolizumab in this report.

Case: A 72-year-old female patient was operated due to a metastatic malignant melanoma originating from the right sole in January, 2017 and then pembrolizumab treatment was launched after November, 2017. Complete response was achieved in mestastatic lesions of our patient in PET-CT response evaluation after 4-cure-pembrolizumab treatment and the patient received 4 more cures. Wedge resection was carried out from the left lower lobe by the thoracic surgery after 6-mm lesion was seen in the left lung love in new PET-CT. HMB-45 and Melan-A was negative and TTF-1 was reported as focal positive and cytokeratin positive lung adenocarcinoma in pathologic evaluation. Wedge resection material was reported as Stage1A and thus any adjuvant therapy was not considered for the lung adenocarcinoma. Pembrolizumab treatment currently continues for the patient.

Conclusion: We presented a quite rarely seen case where malignant melanoma and lung adenocarcinoma were concurrent. The lesions which might be considered as metastasis far from malignant melanoma and other malignancies where treatment is applied are recommended to be histopathologically evaluated by taking these lesions into consideration as the 2nd primary as far as possible.

Keywords: Adenocarcinoma, malignant melanoma, pembrolizumab

EP-17

Chronic Hepatitis due to Ipilimumab Use in a Patient with Metastatic Malignant Melanoma

Haydar Kayalı,[1] Ali Murat Tatlı,[2] Sema Sezgin Göksu,[2] Hasan Şenol Coşkun,[2] Mete Akın[3]

[1]Department of Internal Medicine, Akdeniz University, Antalya; [2]Department of Medical Oncology, Akdeniz University, Antalya; [3]Department of Gastroenterology, Akdeniz University, Antalya

Immunotherapy has been a treatment option which has gradually more used in cancer treatment. Early diagnosis and management of specific side effects which progressed based on these treatments are important.

A 34-year-old male patient applied due to a wound where there was an itchy bleeding in the right supraclavicular region and he was received diagnosis of malignant melanoma after excision. Vemurafenib kobimetinib treatment was launched in the braf mutant patient in whom stage 4 disease was seen through his pet bt.

The treatment continued for 1 year after almost complete response in lesions was observed in pet bts. Liver metastasis was seen in abdomen mrg when an increase was seen in cholestasis enzymes in the follow-up. Ipilumumab was launched in the patient in whom progression was observed under the braf inhibitors. Alt and ast values increased 5 times over normal range after 2 cures of Ipilimumab. Viral and autoimmune hepatitis markers were negative. 1 mg/kg dose of methylprednizolon was launched by considering ipilimumab-dependent hepatoxicity.The patient who received steroid treatment at the signified dose for 10 days discontinued the medicine willingly. The patient who skipped his oncology follow-ups applied to gastroenterology. Alt value still progressed over 5 times, thus liver biopsy was carried out and chronic hepatitis-fibrosis score of liver biopsy was evaluated as 4/6. The patient whose methylprednizolon treatment was re-launched suffered a generalized attack on the 3rd day of the treatment. Metastasis was seen in the right temporal lobe of the patient in the mrg and antiepileptic treatment was launched for this patients by the neurology. It was seen that metastatic lesions in the liver disappeared in the last Pet-CT of the patient who did not regularly come for his controlls; but the levels of enzymes were still high. It was learnt that he willingly discontinued his cortisol treatment after antiepileptic treatment was launched and steroid treatment was re-launched. Radiotherapy was planned for the patient's cranial metastasis but he rejected the treatment.

Hepatotoxicity occurred after 2 cycles of ipilimumab. Despite the appropriate treatment administered for hepatotoxicity, the patient developed chronic hepatitis due to drug incompatibility. Data suggesting that treatment response in individuals with advanced immune response may be better is consistent with our case. Metastatic lesions of the patient in the liver completely regressed. In hepatoxicities that do not respond to steroids, other immunosuppressors such as mycophenolate mofetil may start to be administered.

Keywords: Hepatotoxicity, immunotherapy, ipilimumab, melanoma

EP-18

In Mezothelioma: The Prognostic Importance of Mesothelin and Stathmin-1 Expression and the Effects of Mesothelin and Stathmin-1 Silencing with Sirna in Mesothelioma Cell Lines on Autophagy, Invasion and Apoptosis

Asude Aksoy,[1] Gökhan Artaş,[2] Ebru Önalan,[3] Ahmet Tektemur[3]

[1]Department of Medical Oncology, Firat University Faculty of Medicine, Elazig; [2]Department of Pathology, Firat University Faculty of Medicine, Elazig; [3]Department of Medical Biology and Genetics, Firat University Faculty of Medicine, Elazig

Mesothelioma (MZM) is an aggressive cancer. In the proliferative process of many cancers, Stathmin-1 (STHMN-1) makes microtubule structure changes via PIK3 pathway and mesothelin (MSTN) affects cell proliferation-invasion in oncogenesis. The detection of molecular changes playing a role in MZM etiopathogenesis will set important goals in the treatment. In this study, immunohistopathological-clinicopathologic evaluation of MZM specimens was conducted and it was investigated how these activations were reflected in MZM cell lines by siRNA-based MSTN and STHMN-1 silencing on autophagy, metastasis biology and apoptosis (OMA) gene panels.

Biopsy specimens of cases with MZT and control group (30 patients each) were evaluated by immunohistochemical methods for MSTN and STHMN-1 expression. The effects of these immunoreactivity on survival (OS) were analyzed with appropriate analyzes and the results were evaluated at 95% confidence interval and $p<0.05$ significance level.

In the SPS212 MZM cell lines, MSTN and STHMN-1 specific siRNAs were transfected with gene panels targeting OMA activities. RT-PCR was studied after RNA isolation. The findings were calculated with ΔΔCt module.

An increased STHMN-1 expression was found in MZT patients compared to the control group ($p<0.05$). An independent prognostic effect of MSTN on OS

was observed in survival analyzes (p<0.05) (Table 1, 2, Fig. 1).

After SiRNA administration, MSTN and STHMN-1 decreased in the control group (p=0.007, p=0.0082). According to ΔΔCt module, the percentage of reduction of siRNAs was determined as 87.5% and 81.5%, respectively.

It was determined that MSTN siRNAs silenced BAK1, BAX, CASP-1, CLND7, CSF3, TIMP2 and ATG16L1 while STHMN-1 siRNAs silenced BCL2 (p<0.05).

In the specimens of cases diagnosed with MZT, both MSTN and STHMN-1 immunoreactivity were detected and it was thought that this could be utilized in the diagnosis stage as STHMN-1 was expressed significantly. It was concluded that it may be appropriate to select treatments that target primarily MSLTN in the treatment of MZT especially because OMA genes are silenced significantly with MSTN siRNAs in the cell lines, it was observed that apoptosis could be increased and MSTN is an indepent factor for OS.

Keywords: Apoptosis, immunoreactivity, mesothelioma, mesothelin, stathmin-1, siRNA

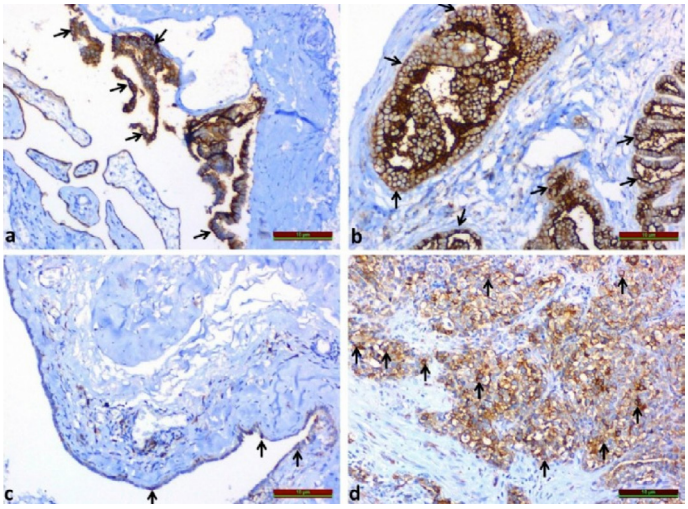


Figure 1. (a) Control tissue for mesothelin, (b) Mesothelin expression immunoreactivity (p>0.05). (c) Control tissue for Stathmin-1, (d) Stathmin-1 expression immunoreactivity (p<0.05)

Table 1. Mesothelioma and Stathmin-1

Groups	Mesothelin		Stathmin-1	
	Control group	Cancer cells	Control group	Cancer cells
Control group	2.31±0.50	-	0.88±0.21	-
Mesothelioma	-	2.23±0.55	-	2.13±0.49a

Values are indicated as mean ± standard deviation. (a) When compared to the control (pleurit, empyema) group (p <0.05). * Paired samples were conducted with T tests.

Table 2. Mesothelioma and Stathmin-1

		Univariate Analysis				Multivariate Analysis	
Variables	n, (*,%)	HR	95% confidence interval	P	P	HR	95% confidence interval
Age1	54.5±7.28	1.023	0.967-1.083	0.430	0.063	1.374	0.983 - 1.920
Gender Female Male	10 (33.3) 20 (66.7)	-	-	0.015	0.144	0.028	0.000 - 3.416
Mesothelioma Peritoneal MZT Pleural MZT	17 (56.7) 13 (43.3)	-	-	0.421	0.095	10.021	0.668-150.44
Mesothelin		0.455	0.206-1.004	0.051	0.041	0.015	0.000 - 0.845
Prior CEA	31.3 (3-92)2	0.649	0.423 0.998	0.049	0.009	0.015	0.186 - 0.785
After CEA	2.24(0-5.10)2	1.015	0.777-1.326	0.914	0.017	3.338	1.241 – 8.978
CT status Administered Not Administered	23 (76.7) 7 (23.3)	-	-	0.854	0.443	0.666	0.235 - 1.884
RT condition Administered Not Administered	7 (23.3) 23 (76.7)	-	-	0.286	0.199	9.040	0.313-261.1

LVI: Lymphovascular invasion, CT: Chemotherapy, RT: Radiotherapy, CEA: Carcinoembrionic antigen, HR: Risk ratio, 1: Median, 2: Average, MZT: Mesothelioma, Univariate and multivariate analyses were used.

EP-19

Docetaxel Associated Intracranial Hypertension

Özlem Özdemir,[1] Enise Nur Özlem,[2] Ahmet Alacacıoğlu,[1] Yüksel Küçükzeybek[1]

[1]Department of Medical Oncology, Katip Celebi University Ataturk Trainig and Research Hospital, Izmir; [2]Department of Neurology, Katip Celebi University Atatürk Trainig and Research Hospital, Izmir

Introduction: Pseudotumor cerebri (PTS) is used to identify increased intracranial pressure in the absence of a structural lesion such as an intracranial space-occupying lesion, meningeal inflammation or venous occlusion. PTS case was reported in a patient, who was administered Docetaxel treatment, due to breast cancer neoadjuvant treatment.

Case: A 48-year-old female patient who received neoadjuvant docetaxel treatment for locally advanced breast cancer applied to our outpatient clinic with complaints of headache accompanied by nausea and vomiting, lateral gaze restriction in the left eye and diplopia. In the fundus oculi examination of the patient, apparent papilla edema, disc nasal hemorrhage and minimal disc edema on the right were detected. Cranial MRI of the patient showed flattening in the sclera, tortuous appearance of the optic nerve, and deletion of the pituitary gland on the basis of his age. The patient's CSF pressure was detected to be 300 mmH_2O at lumbar puncture. CSF biochemistry and cell count of the patient was found to be normal and mannitol and diazomide treatment was started to reduce intracranial CSF pressure. The fundus oculi examination of the patient returned to normal and he was referred to our outpatient clinic for re-evaluation.

Discussion: Modified Dandy criteria are widely used for the diagnosis of PTS. These criteria include increased symptoms and signs of intracranial pressure, no neurological findings indicating localization, normal neurological imaging without evidence of venous obstructive disease, increased intracranial pressure as measured by lumbar puncture with normal CSF components and no other cause of intracranial pressure increase. Because of the serious liquid retention properties of taxanes, it was thought to cause PTS clinic in the patient and his treatment was planned accordingly.

Result: Taxane-associated PTS was reported in the literature only in one patient. Since taxanes are used extensively in oncology, PTS is a manageable adverse effect that should be taken into account.

Keywords: Docetaxel, pseudotumor cerebri, taxane

EP-20

A Case of Small Cell Lung Carcinoma with Thyroid Metastasis

Selami Bayram, Arif Hakan Önder, Banu Öztürk

Department of Medical Oncology, Health Sciences University Antalya Training and Research Hospital, Antalya

Objective: Metastatic tumors of the thyroid gland are rare cases compared to primary tumors. The primary focus is usually kidney, lung, breast and stomach. This paper intends to present a case of small cell lung cancer with thyroid metastasis, which is rarely seen in clinical practice.

Case: The patient was a 54-year-old, female heavy smoker (35 p/y) who was admitted to our hospital with complaints of cough for more than one month with increased severity in the last 1-2 days and shortness of breath increasing with effort. The patient had no medical history of chronic disease and drug use. On physical examination, respiratory sounds were evidently decreased in the left hemithorax. Her PA AC radiography showed a diaphragm elevation in the left hemithorax and extensive opacity increase especially in the hilar region (Fig. 1). Thorax CT revealed a mass lesion on the left that began at the level of the hilus and enveloped the pulmonary vein and artery and evidently obliterated the left main bronchus (Fig. 2). In the PET-CT taken for staging purposes, 15x30 mm hypodense nodular lesion (SUV: 13.9) in the right lobe of the thyroid gland, 27x32 mm lymph node in the mediastinum station 7 (SUV:14.5) and 6x8x8.8 cm irregular confined mass lesion evidently obliterating the left main bronchus in the left hilar region (SUVmax: 20.5; primary lesion) were detected (Figs. 3, 4). The patient underwent fiberoptic bronchoscopy and submucosal and transbronchial biopsies were performed and the result was re-

ported as "Small Cell Lung Carcinoma". TFNSB was applied to the thyroid right lobe nodule and the pathology result was reported as "Malignant cytology, primarily small cell lung carcinoma metastasis should be considered". Patient was started with Cisplatin-Etoposide chemotherapy.

Conclusion: Lung cancer metastasis to the thyroid gland is rare. However, the possibility of metastasis of thyroid nodules in small cell lung cancer patients should be considered and the diagnosis must be confirmed by fine-needle aspiration biopsy.

Keywords: Lung cancer, metastasis, thyroid

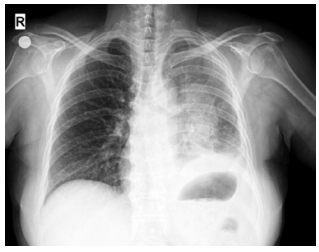


Figure 1. PA AC

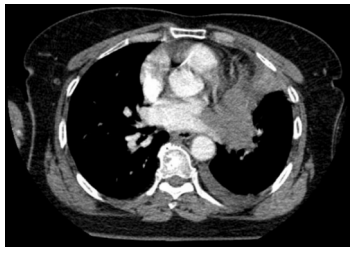


Figure 2. THORAX CT

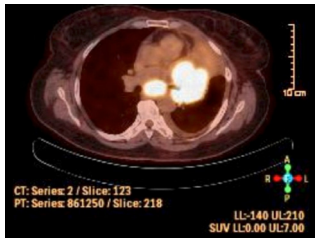


Figure 3. PET-CT

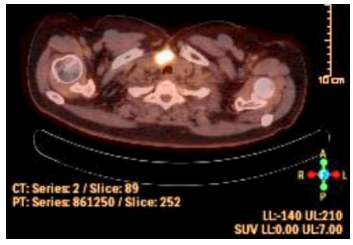


Figure 4. PET-CT

EP-21

Cervix Adenocarcinoma Metastasis Forming Acute Pancreatitis Clinic: Case Report

Umut Çakıroğlu,[1] Sema Taban,[2] Gamze Gököz Doğu,[1] Nail Özhan,[1] Serkan Değirmencioğlu,[1] Atike Gökçen Demiray,[1] Arzu Yaren[1]

[1]Department of Medical Oncology and Internal Medicine, Pamukkale University Faculty of Medicine, Denizli, Turkey; [2]Department of Internal Medicine, Pamukkale University Faculty of Medicine, Denizli, Turkey

Case: In April 2014, TAH + BSO was performed in a 70-year-old woman diagnosed with cervical adenocarcinoma after the cervical biopsy, which was performed after the complaint of vaginal bleeding that has been ongoing for 1 month. Pathology result was reported as endocervical adenocarcinoma, tumor 1.5x1cm, histological grade 2, stromal invasion depth 1.5 cm, 15/42 metastatic LN. The patient at Stage T1b1N1M0, FIGO Stage IB1 was treated with 3 cycles of carboplatin-paclitaxel postoperatively. Then the patient received curative IMRT for the cervical and lymphatic area. Upon detection of abdominal lymphadenopathy the imaging performed on June 2016, paraaortic LN excision was performed. The pathology results were 7/8 metastatic LN, compatible with cervical adenocarcinoma. Postoperatively, 8 cycles of cisplatin + paclitaxel + bevacizumab were administered. Since allergy to cisplatin developed in the patient whose intraabdominal LN metastases were found to be stable in the evaluations, weekly carboplatin + paclitaxel chemotherapy was administered. Because of carboplatin allergy, treatment was discontinued at the second cycle. After three cycles of weekly gemcitabine treatment, following the first cycle of gemcitabine + bevacizumab; the patient was admitted to the emergency room with abdominal pain, nausea and vomiting. The patient was hospitalized because of a clinical condition compatible with acute pancreatitis in the emergency abdominal CT and biochemical tests. In MR cholangiography; increased thickness of the gallbladder wall and slightly distended appearance of the galbladder, mild prominence in intrahepatic and extrahepatic biliary tract, dilatation in pancreatic duct, and nodular lesion with limited diffusion at the pancreatic head were observed. (Fig. 1) Endoscopic retrograde cholangiopancreotography was performed. Endoscopic sphincterotomy and plastic stenting were performed with choledochus biopsy. The pathology result was tumoral emboli compatible with extensive cervical adenocarcinoma at the lamina propria.

Discussion: It should be kept in mind that the causes of pancreatitis in cancer patients include lymph node compression, metastasis to the pancreas, chemotherapy, or targeted agent-associated pancreatitis and metastatic masses causing obstruction in the choledochal duct.

Keywords: Acute pancreatitis, cervical adenocarcinoma, endoscopic retrograde cholangiopancreatography

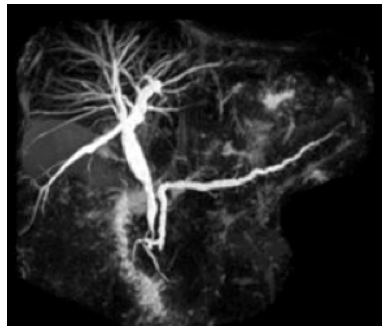


Figure 1. Increase in gallbladder wall thickness and slightly distended appearance of the gallbladder, slight prominence in intrahepatic and extrahepatic biliary tract, dilatation in pancreatic duct, nodular lesion with limited diffusion at the pancreatic head

EP-22

Evaluation of Patients' Risk of Anxiety and Depression Before Chemotherapy and After First Line Treatment: Pamukkale University Medical Oncology Department Pilot Study Results

Umut Çakıroğlu,[1] Gamze Gököz Doğu,[1] Sema Taban,[2] Nail Özhan,[1] Serkan Değirmencioğlu,[1] Atike Gökçen Demiray,[1] Arzu Yaren[1]

[1]Department of Medical Oncology, Department of Internal Medicine, Pamukkale University Faculty of Medicine, Denizli, Turkey; [2]Department of Internal Medicine, Pamukkale University Faculty of Medicine, Denizli, Turkey

Aim-Method: In our study; the patients who applied to Pamukkale University Medical Oncology Clinic and started chemotherapy were evaluated using Hospital Anxiety Depression (HAD) Scale before and after chemotherapy to determine whether they are at risk of anxiety and depression. The HAD scale consists of anxiety (HAD-A) and depression (HAD-D) subscales, and is a self-report scale comprising 14 items, 7 of which are depression (even numbers) and 7 of which are symptoms of anxiety (odd numbers). Responses are evaluated as 4-Likert type and scored between 0-3. The aim of the scale is not to make a diagnosis, but to determine the risk group by screening for anxiety and depression in a short time. In the study conducted in Turkey, cut-off scores for anxiety subscale was 10, and for the depression subscale, 7. Based on this result, those score above these are considered to be at risk. HAD was preferred because it does not contain any items related to physical symptoms.

Results: When the HAD Scale was evaluated, in the first questionnaire, 18 patients were at risk of anxiety and 18 were at risk of depression. Thirteen patients were at risk of both anxiety and depression. According to the second questionnaire, 13 patients were at risk of anxiety disorder and 68 were at risk of depression. Eleven patients were at risk of both anxiety and depression.

Discussion: When the mean scores of the HAD Scale were evaluated, it was observed that the patients were at a high risk of depression during the diagnosis and treatment period. This risk was 82.5% before chemotherapy, and increased to %85 after the first line therapy. Due to these high rates, psychooncology units should be established in oncology clinics.

Keywords: Anxiety, depression, hospital anxiety depression (HAD) scale, psychooncology

EP-23

Simultaneous Gastric and Skin Metastatic Triple Negative Invasive Lobular Breast Cancer Case

Pınar Dal Konak,[1] Betül Peker Cengiz[2]

[1]Department of Medical Oncology, Eskisehir Yunus Emre State Hospital, Eskisehir; [2]Department of Pathology, Eskisehir Yunus Emre State Hospital, Eskisehir

Introduction: Lobular cancer is the second most common cancer in breast after invasive ductal cancer (5-15%). Breast cancer metastasis to the skin and gastrointestinal system is rare. When metastases in such rare areas are detected, they must be distinguished from the secondary cancer.

Case: The biopsy pathology of the extensively ulcerated lesion from a 65-year-old female patient who had undergone endoscopy due to dyspeptic complaints was reported as poorly differentiated gastric adenocarcinoma. The patient did not have any known systemic diseases and family history of cancer. The biopsy result of the nodular masses that developed over the last 6 months at her neck and do not exceed 1 cm in size were reported as neoplasia, with primary breast? lung? skin ? Clinical evaluation was recommended for differential diagnosis. On physical examination, the patient had no other pathological findings except the 10-12 skin nodules on the patient's neck and face, palpable lymph nodes, each approximately 2 cm in size, under each armpit, and mild stiffness at the skin of her right breast. PET CT revealed no other pathologies except a 0.6 cm lesion on the right nasal skin (Suv: 3.6), and multiple lymph nodes (Suv: 2.6) at both cervical regions, the largest one on the right being approximately 1.3 cm in diameter. The tumor markers CEA and CA15-3 were elevated. Considering that the patient may have two different cancers, stomach, skin nodule and armpit lymph node biopsies were obtained once more. As can be seen in the picture, all three biopsies were compatible with breast invasive lobular cancer. The patient, who was diagnosed with triple negative breast lobular cancer, underwent brain MR, thorax and abdominal computed tomography before chemotherapy. A mass lesion of 2 cm at the back of the right eye and metastatic involvement at thoraco-lumbar vertebrae were detected. Then, chemotherapy was initiated.

Keywords: Breast, stomach, cutaneous metastasis

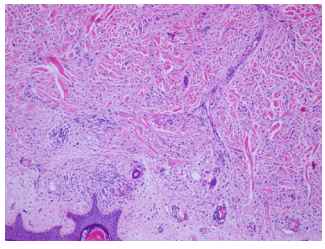


Figure 1. Skin 1, 100xH&E

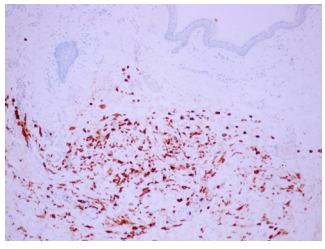


Figure 2. Skin 2, 100x GCDFP-15

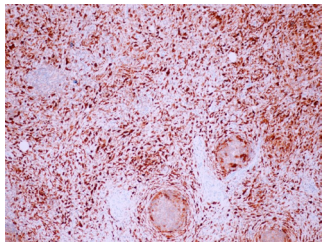


Figure 3. Axillary Lymph Node. 100x GCDFP-15

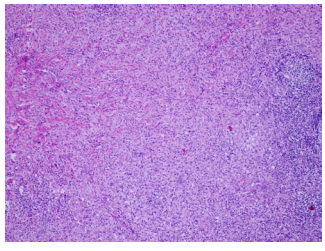


Figure 4. 100x H&E

EP-24

Breast Carcinoma Case with Drug-Dependent Lung Toxicity After Neoadjuvant Chemotherapy

Merve Önder,[1] Bahiddin Yılmaz,[2] Derya Sarıkaya,[2] Nurhan Köksal,[3] İdris Yücel[2]

[1]Department of Internal Medicine, OMU Samsun; [2]Department of Medical Oncology, OMU Samsun; [3]Department of Pulmonary Medicine, OMU, Samsun

Introduction: Doxorubicin is an antineoplastic agent in the anthracycline class. Its major toxic effect is cardiotoxicity. In addition, liver, lung, testicular and bone marrow toxicity are prominent. Docetaxel is a taxane group agent and is used in the treatment of many solid tumors. Neutropenia, hypersensitivity reaction, pneumonitis are its common side effects.

Case: The patient diagnosed with breast carcinoma, which is staged as T1N1M0 clinically, was prescribed with 6 cycles of neoadjuvant Doxorubicin + Docetaxel. She was admitted to the emergency department 2 weeks after receiving her 6th cycle of chemotherapy. HRCT was scheduled for the patient who had complaints of fever, dyspnea, tachypnea and cough and had opacity in bilateral lower zones according to her PAAC. Significant ground-glass densities and alveolar densities were observed in the upper lobes and perihilar areas of both lungs. Diffuse lung disease, viral pneumonia, drug-affected lung, hypersensitivity pneumonia were identified as pre-diagnoses. In addition to the treatment with piperacillin + tazobactam, levofloxacin, trimethoprim + sulfamethoxazole, keeping the drug - induced interstitial lung disease in mind, IV prednisolone 250 mg was applied on the first day and then continued at 100 mg/day. On the 13th day of hospitalization, upon observing that the infiltrations in PAAC radiography regressed and vital signs and symptoms improved, it was suggested that prednisolone treatment should be tailed off, and the patient was discharged.

Discussion: Drug - induced interstitial lung disease should be kept in mind in patients who have fever after chemotherapy and unexpected findings in AC. It is observed as bilateral heterogenous or homogenous opacity on the direct radiographs. Opacity is mostly seen in the middle or lower zones. In HRCT images, it mostly has a scattered or diffused crushed glass appearance. The first thing to do is to stop the drug exposure. The corticosteroid should then be administered to relieve the symptoms. The starting dose of corticosteroids can usually be calculated as 1 mg/kg daily. However, the dose may be increased according to the clinical condition of the patient. Corticosteroids, which are initially administered at high doses, are reduced in days according to the patient's complaints and the treatment is regulated.

Keywords: Breast carcinoma, chemotherapy, interstitial lung disease

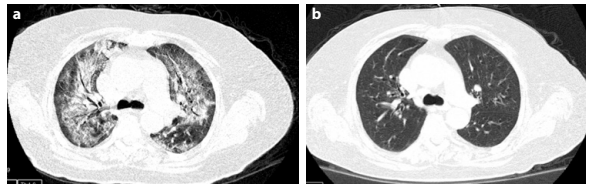


Figure 1. (a) HRCT image before treatment. (b) Control image after treatment

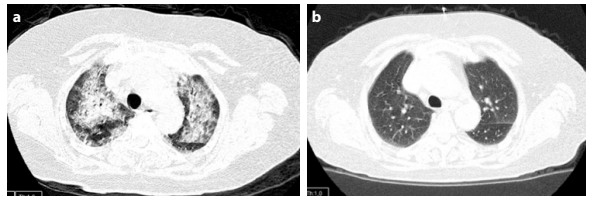


Figure 2. (a) HRCT image before treatment. (b) Control image after treatment

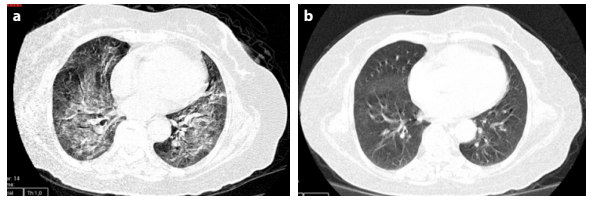


Figure 3. (a) HRCT image before treatment. (b) Control image after treatment

EP-25

Clinical-Pathological Features of Operated Breast Cancer Patients Diagnosed via Mammography and Evaluation of Disease Outcomes

Mustafa Karaca,[1] Deniz Tural,[2] Ahmet Özet[3]

[1]Antalya Training and Research Hospital, Antalya; [2]Bakirkoy DR. Sadi Konuk Training and Research Hospital, Istanbul; [3]Gazi University Faculty of Medicine, Ankara

Objective: The aim of this study is to compare the clinicopathological features of operated patients with breast cancer who were diagnosed via mammography or consulted the doctor symptomatically, and to evaluate their disease-free duration.

Materials and Methods: Data of 1004 operated breast cancer patients who were diagnosed with breast cancer between 17.05.2000 - 19.06.2016 were analyzed retrospectively using patient files and electronic medical record systems. A total of 828 patients who had appropriate follow-up and treatment data for survival analysis were included in the study. Whether the diagnosis of patients was made according to mammographic screening or consulting symptomatically, patient's age, weight at the time of diagnosis, menopausal status, type of operation, hormone receptor status, HER2 receptor status, pathological stage, grade, histological subgroup, lymphovascular invasion, perineural invasion status, adjuvant chemotherapy status, adjuvant herceptin status, adjuvant hormonal treatment status, adjuvant radiotherapy status were determined. Patients' date and location of recurrence, and the last examination date for those who did not have a recurrence, were identified. The histopathological features of the patients who were diagnosed via mammography and those who were diagnosed upon consulting the doctor symptomatically were compared.

Results: A total of 324 (39%) patients were diagnosed with breast cancer by mammographic screening.

When the histopathological features of the patients diagnosed with mammography and diagnosed upon consulting symptomatically were compared; the percentage of postmenopausal patients were 60.4% vs. 52% (p=0.011), number of grade 3 patients were 24.2% vs. 32.9% (p=0.005), pT1 ratio was 48.5% vs. 26% (p=0.0001), axial lymph node positivity was 30% vs 53.7% (p=0.0001), LVI was 13.7% vs 31.6% (p=0.0001), PNI was 7.2% vs. 18.1% (p=0.0001), respectively. In addition, when the mammography group and the other group were compared, adjuvant CT was 67% vs. 85% (p=0.0001), hormonal treatment was 87.3% vs. 82% (p=0.001), respectively. No difference was detected between the two groups in terms of recurrence (12 vs 12.6%; p=0.4).

Median follow-up period was 48 months (6-185) and median DFS was 37 months (9-184). In the univariate analysis for DFS, prognostic parameters were also evaluated. The statistically significant effects of pathological stage (p=0.002), grade (p=0.002), PNI (p=0.027), LVI (p=0.0001), Hormone receptor status (p=0.001), Triple negativity (p=0.016), Luminal A patient group (p=0.048) on DFS were detected. No significant effect of diagnosis via mammographic screening and other parameters on DFS were found (p>0.05).

Conclusion: The patients in the mammographic screening group were found to be at an earlier stage, have higher axilla negative rate, in the postmenopausal condition, at a low grade, have less LVI, PNI ratio and high rate of hormone receptor positivity. In addition, patients diagnosed with mammography were found to receive less chemotherapy and more hormonal treatment. Although the mammographic screening group had good prognostic parameters compared to the symptomatic group, recurrence rates were similar to the symptomatic group. In the survival analysis, the recurrence rate of these patients was similar to the symptomatic patients.

SB-01

What we Asked For, What Responses did we Get?

Mahmut Büyükşimşek, Abdullah Evren Yetisir

Department of Oncology, Cukurova University, Adana

Objective: It is not always easy to reach the molecules that have proven to be effective in the oncology community, where new developments occur and new drugs are approved for use on a daily basis. We can now submit our non-indicative drug requests, for which we used cargo carriers in the past, via REIYS system and we wanted to evaluate what our requests were from the Ministry of Health in the last two years and what their responses were.

Method: 380 applications filed by two physicians in 2016-2018 over REIYS system were examined. How many requests were made for each active substance and how many of those were approved or rejected, along with their reasons, were evaluated.

Results: Request for Rituximab was made 32 times in total. It was requested for diffuse large B-cell, mantle cell, follicular lymphoma, marginal zone lymphoma, CLL and castleman disease.It was rejected twice because KLL maintenance and marginal zone lymphoma maintenance data were not sufficient. Indication: Multiple myeloma. Application was made for Ibrutinib for 16 times and they were rejected three times. It was requested for CLL, mantle cell lymphoma, Mediastinal Lymphoma, Cerebral Lymphoma, Diffuse Large B-cell Lymphoma, GVHD indications after AML transplantation. Since sufficient data were not available in GVHD and options were not exhausted for mantle cell and diffuse large B-cell lymphoma, it was rejected. Vandetanib was requested 4 times for thyroid medullary carcinoma and all of them were approved. Regorafenib was requested 3 times. Indication: HCC was rejected twice but approved once.All three applications were made for post-sorafenib progression. Ponatinib KML was requested twice for imatinib, dasatinib and nilotinib and it was approved in both cases.

Discussion: While all the applications for some drugs were approved, it was not possible to get approval for some. The Ministry does not impede the use of specific drugs but it seems that it wants to have the final say on their use. It does not seem possible yet to use certain drug groups with proven effectiveness in our country.

Keywords: Active substance, approval, REIYS system, rejection

SB-02

The First Patient Treated with Lutecium and Responded in Medullary Thyroid Carcinoma: The Experience of Pamukkale University

Umut Çakıroğlu,[1] Gamze Gököz Doğu,[1] Nail Özhan,[1] Serkan Değirmencioğlu,[1] Atike Gökçen Demiray,[1] Tarık Şengöz,[2] Aziz Gültekin,[2] Doğangün Yüksel,[2] Sema Taban,[3] Arzu Yaren[1]

[1]Department of Internal Diseases, Department of Medical Oncology, Pamukkale University Faculty of Medicine, Denizli; [2]Department of Nuclear Medicine Pamukkale University Faculty of Medicine, Denizli; [3]Department of Internal Diseases, Pamukkale University Faculty of Medicine, Denizli

Case Report: In the neck USG of a 33-year-old male patient, hypoechoic nodules of 17x13 mm in the left upper lobe of the thyroid graft and with microcalcification sites of 12x 13mm and multiple lymph nodes in the left side of the neck with conglomerate appearance were detected. Total thyroidectomy and bilateral neck dissection were performed on the patient. Pathology result was medullary carcinoma (pseudopapillary variant), 44/49 metastatic lymph nodes with a tumor diameter of 2.4cm. In a patient with T2N1bM0, Stage IVA, PET CT revealed a tumor mass lesion at the size of 43.9x27.6x23.3mm located in the left retropharyngeal region. Calcitonin value evaluated due to recurrence was 2097 pg/mL and CEA level was 43.65 ng/mL. The neck MRI revealed a solid mass lesion at the size of 62x37x25mm invading the internal carotid artery wall in the parapharyngeal area. When the patient refused the surgery, sorafenib treatment was started. RET protooncogen mutation was negative. Ga-68 DOTATATE screening was performed due to the lack of regression in the control after three months of treatment. In the left parapharyngeal region, sites with Ga-68 DOTATATE adhesion were found in the right submandibular lymph node, right thyroid region, left femur neck, vertebra T8 and left iliac bone. Lu-177 DOTATATE treatment was planned for the patient who did not respond to sorafenib treatment. After two treatment sessions with lutecium, regression was observed in the size of metastatic lesions. The continuation of lutecium treatment was planned for the patient with partial response.

Discussion: They are tyrosine kinase inhibitors, for which vandetanib and cabozatinib are recommended, because medullary thyroid carcinomas do not respond well to dacarbazine-based chemotherapies. In cases where these agents cannot be reached or used, sorafenib, sunitinib, lenvatinib and pazopanib may be used. Nowadays, Lu-177 DOTATATE is the most commonly preferred radiopharmaceutical in the teranostic treatment because its adverse effect is lower and it substantially improves the life quality. Thus, this makes a higher number of applications possible. This method may be used in personalized medical practice.

Keywords: Ga-68 DOTATATE, Lu-177 DOTATATE, medullary thyroid carcinoma, personalized medical practice, sorafenib, teranostic

SB-03

Does Vitamin D Prolong Survival in Patients with Postmenopausal Breast Cancer that Use Hormone Receptor Positive Aromatase Enzyme Inhibitor?

Mevlüde İnanç,[1] Beyza Gökalp,[2] Oktay Bozkurt,[1] Metin Özkan[1]

[1]Department of Medical Oncology, Erciyes University Faculty of Medicine, Kayseri; [2]Department of Internal Diseases, Erciyes University Faculty of Medicine, Kayseri

Objective: Despite significant advances in breast cancer biology, the course of individual disease has not been fully understood yet. A significant amount of data had predicted that bone health could be important to determine the course of breast cancer. There are controversial studies on the effect of Vitamin D and bisphosphonate on breast cancer recurrence. Our aim was to evaluate the effect of the administration of Vitamin D and bisphosphonate on the breast cancer prognosis in patients with early stage breast cancer who use aromatase enzyme inhibitor.

Material-Method: A total of 545 female patients, who were retrospectively diagnosed with breast cancer in 2002 - 2017 and were administered adjuvant aromatase enzyme inhibitor (AI) and received Vitamin D and/or oral bisphosphonate treatment due to osteoporosis, which developed secondary to that, were included in the study.

Findings: The median age of the patients included in the study was 54 (43-82). When the patients who used and did not use Vitamin D were evaluated for HSK, the median duration could not be reached and the mean duration was (161 months & 145 months, respectively; p=0.01). Similarly, GSK in patients who used and did not use Vitamin D was (163 months & 149 months, respectively; p=0.036) (Fig. 1). HSK was found to be (143 months & 163 months, respectively, p<0.001) and GSK was found to be (146 months & 165 months; p<0.001) in patients who used Vitamin D for less than 36 months and used it for more than 36 months. The effect of the use of bisphosphonates on survival could not be demonstrated. This effect was demonstrated to be independent of the duration and stage of hormonal treatment in patients. In addition, bone metastasis was observed less in patients who used Vitamin D when patients were evaluated in the follow-up based on the bone metastasis condition (17/385; 4.4% & 16/160; 10% p=0.01). Similarly, complications related to bone metastasis (compression fracture, pathological fracture, and hypercalcemia) were observed less in patients who used Vitamin D (p=0.02).

Conclusion: The use of Vitamin D in patients with postmenopausal breast cancer prolongs both disease-free and overall survival and decreases the risk of developing bone metastasis.

Keywords: Breast cancer, biphosphonate, survival vitamin D

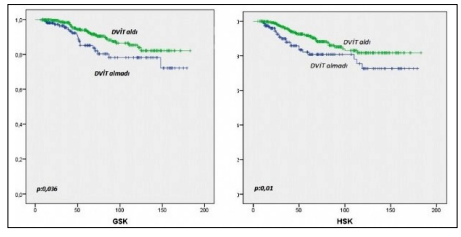


Figure 1. The relationship between GSK and HSK and the use of vitamin D.

SB-04

The Prognostic Value of Inflammatory Indices in the Survival of Patients with Metastatic Lung Adenocancer Treated with First-Line Platinum-Based Chemotherapy: A Retrospective Study

Oktay Bozkurt, Mevlüde İnanç

Department of Medical Oncology, Erciyes University Faculty of Medicine, Kayseri

Objective: A prognostic correlation between various types of cancer and inflammatory markers was reported. In our study, the pre-treatment prognostic value of neutrophil-lymphocyte ratio (NLR), platelet-lymphocyte ratio (PLR) and systemic immune inflammation index (SII) were investigated in patients with metastatic lung adenocancer treated with first-line chemotherapy.

Method: A total of 292 patients with metastatic lung adenocancer were retrospectively reviewed. The potential correlation between NLR, PLR and SII and progression-free survival (PFS) and overall survival (OS) was investigated.

Findings: NLR (<2.5 and ≥2.5), PLR (<170 and ≥170) and SII (<750 and ≥750) were divided into two groups according to the threshold values determined by ROC analysis. The lower inflammatory indices were found to be correlated to longer PFS (7 vs 5; 7 vs 4; 8 vs 5 months; p<0.001, p<0.001, p<0.001) and OS (20 vs 11; 16 vs 11; 19 vs 11 months, respectively, p<0.001, p<0.001, p<0.001). In multivariate analysis, high PLR and SII were found to be correlated with short PFS (HR 1.71, p=0.002, HR 1.71, p <0.001, respectively) and high NLR was found to be correlated with short OS (HR 1.72, p<0.001). The patients were categorized into three groups, i.e. group 1 [low NLR, PLR and SII; 39 (13.4%)]; group 2 [high NLR or PLR or SII; 44 (15.1%)] and group 3 [two or three high indices, 209 (71.6%)]. Median OS was 26, 15 and 11 months, respectively for group 1, 2 and 3 patients (p<0.001), whereas PFS was 10, 6, and 5 months (p<0.001) (Fig. 1).1, 2).

Conclusion: High NLR, PLR and SII were found to be an indicator for shorter PFS and OS in these patient groups. These findings should be confirmed by prospective studies.

Keywords: Lung adenocancer, neutrophil-lymphocyte ratio, platelet-lymphocyte ratio, systemic immune inflammation index

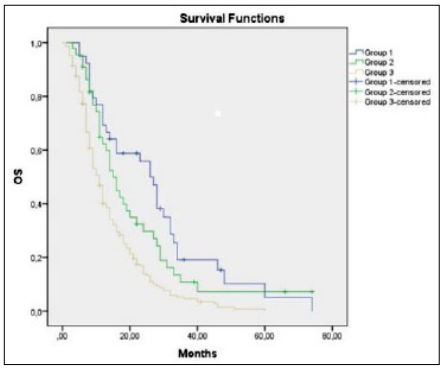


Figure 1. Overall survival of patients with metastatic lung adenocancer treated with first-line chemotherapy by inflammatory index groups (p<0.001).

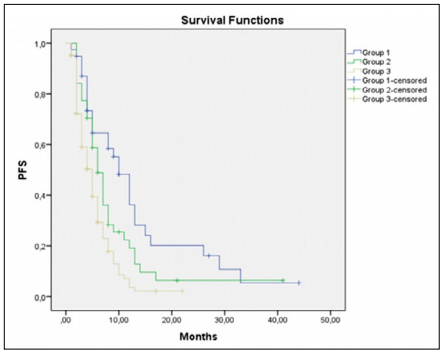


Figure 2. Progression-free survival of patients with metastatic lung adenocancer treated with first-line chemotherapy by inflammatory index groups (p<0.001).

SB-06

The Correlation between Neutrophil-Lymphocyte Ratio and Bevacizumab Response in Metastatic Colorectal Cancer

Ender Doğan, Oktay Bozkurt, Teoman Sakalar, Sumeyra Derin, Mevlüde İnanç, Metin Özkan

Department of Medical Oncology, Erciyes University, Kayseri

Objective: The first-line treatment recommended for patients with metastatic colorectal cancer is biological agents combined with chemotherapy. One of these agents, bevacizumab inhibits vascular endothelial growth factor. The effect of inflammatory markers on bevacizumab was investigated in some publications but has not yet been fully understood. In our study, we investigated the effect of neutrophil-lymphocyte ratio (NLR), one of the inflammatory markers, on PFS and OS in patients taking bevacizumab.

Method: Patients with metastatic colorectal cancer who underwent bevacizumab treatment at Erciyes University were retrospectively screened. In these patients, the cut-off value for NLR was 3.44 based on ROC analysis. Patients were categorized into two groups, i.e. patients having an equal or higher value were categorized under high NLR and patients with lower values under low NLR. Initial metastasis status, history of adjuvant therapy, CRAS status, CEA level, the number of metastatic sites and tumor location were recorded. NLR group was compared to the low group in terms of PFS and OS with Cox regression and Kaplan Meier method.

Findings: The mean age of the 130 patients included in the study was 61 and 64 of the patients were female. The number of RAS wild patients was 63 (48%). 75% of the patients were initially metastatic and tumors of 34 (26%) patients were located in the right colon. In univariate analysis, a high NLR was an indicator for poor PFS. In the multivariate analysis, high NLR level and the right colon were correlated with poor PFS. PFS was 9 months for NLR high group and 11 months for the low group (p=0.013). OS was 23 months for NLR high group and 27 months for the low group (p=0.734).

Conclusion: NLR is an important systemic inflammatory indicator. In patients with metastatic colorectal cancer taking bevacizumab, progression-free survival is better in groups with low NLR.

Keywords: Bevacizumab, colorectal cancer, neutrophil-lymphocyte ratio

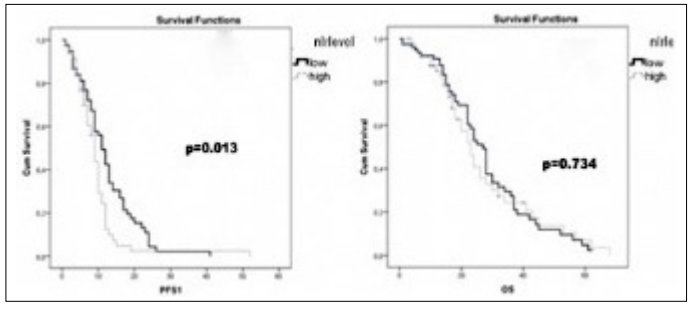


Figure 1. PFS (A) and OS (B) in the NLR high and low groups of patients with metastatic colorectal cancer who take bevacizumab.

SB-07

Evaluation of Predictive Factors in Patients with Bladder Cancer Undergoing Atezolizumab Treatment

Özgecan Dülgar,[1] Emre Akar,[1] Mesut Yılmaz,[1] Didem Canoğlu,[2] Fırat Baytekin,[2] Deniz Tural[1]

[1]Department of Medical Oncology, Bakirkoy Dr Sadi Konuk Training and Research Hospital, Istanbul; [2]Department of Pathology, Bakirkoy Dr Sadi Konuk Training and Research Hospital, Istanbul

Objective: To investigate the factors predicting the response of patients with bladder cancer and treated with atezolizumab to immunotherapy, the clinical and pathological characteristics of the patients and tumor-infiltrating lym-

phocytes (TIL), microsatellite instability (MSI) and programmed death-ligand (PD-L1) expression, which are predictive biomarkers, were evaluated.

Method: The clinical characteristics of four patients, two of whom were operated at our center and two of whom were not eligible for operation, were presented. PD-L1 level in tumor and TIL and PMS2, MSH2, MSH6, and MLH1 gene expressions for microsatellite instability (MSI) were evaluated by immunohistochemical staining in pathological samples of patients.

Findings: The first patient, who underwent surgery, from among 4 male patients diagnosed with bladder cancer and the patient with definitCRT had progression-free survival (PFS) longer than 6 months with atezolizumab treatment. In the pathology samples of the first patient, the PD-L1 expression was strong in the tumor, the staining percentage was 80%, the PD-L1 staining in TIL was 1% and the PD-L1 staining in the peritumoral lymphocytes was 5%. Longer survival times were observed in the first and third patients with moderate to dense intratumoral and stromalTIL ratio. Loss of PMS2, MSH2 MSH6 and MLH1 expression was not observed in the patients. PD-L1 staining was not detected in the pathology of the second patient who underwent operation, but treatment response was not observed. When the clinical factors predicting the response to the second series of treatment were evaluated (performance status, hemoglobin level, presence of liver metastases, response time to platinum-regimen), patients had a risk factor of 0, 2.0 and 3, respectively. GS was detected as 28 months, 11 months, 27 months and 11 months, respectively.

Discussion: Atezolizumab is the first PD-L1 inhibitor that is shown to be effective in bladder cancer (1). In the group with PD-L1 levels greater than 5% in TIL, the highest objective response rates were observed in the phase 2 study (2) (3), significant GS difference with atezolizumab was not observed compared to chemotherapy (4). This is explained by the good chemotherapy response in patients with high PD-L1 levels or the failure of PD-L1 level to serve as a good predictor (4).In our study, patients with high intratumoral and stromalTIL ratio and low clinical risk factors had longer survival with atezolizumab.

Keywords: Atezolizumab, bladder cancer, immunotherapy, PD-L1 level

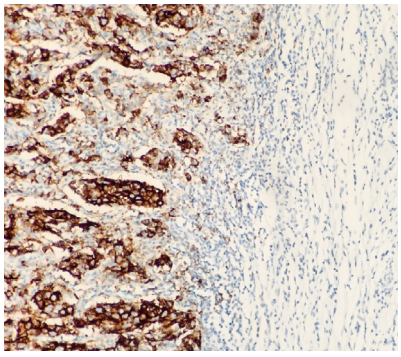


Figure 1. Diffuse membranous and cytoplasmic PD-L1 positivity in the tumor

Table 1. Patient Characteristics

	R.K.	N.E.	A.Ö.	A.T.
Age	66	68	62	45
Stage at the Diagnosis	IIIA	IIIB	IIIA	IV
Response Time to Platinum Regime	9 months	3 months	7 months	5 months
Prior to Two Series ECOG PS	0	1	0	1
Hemoglobin Level prior to Two Series	11.2 g/dl	13 g/dl	12.7 g/dl	8.7 g/dl
Metastasis sites	Bone	Lung+ bone	Lung+ lymph node	Liver+ bone
Treatment series with Atezoluzumab	Second series	Second series	Second series	Second series
The number of Atezoluzumab cures	10 cures	5 cures	12 cures	2 cures
Overall survival	28 months	11 months	27 months	11 months
Stromal tumor-infiltrating lymphocytes	Moderate	Intense	Intense	Light
Intratumoral lymphocyte	Moderate	Minimal	Moderate	Light
PD-L1 staining force in tumor	+++	-	-	-
Percentage of PD-L1 staining in the tumor	80%	0	0	0
PD-L1 in tumor-infiltrating lymphocytes	+		-	-
PD-L1 percentage in TIL	1%	-	-	-
Peritumoral lymphocyte PD-L1	+	+	-	-
Percentage of peritumoral lymphocyte PD-L1	5%	1%	-	-
Microsatellite instability	Low	Low	Low	Low
PMs2/MSH6/MSH2/MLH1	Expressed	Expressed	Expressed	Expressed

SB-08

The Pre-Diagnosis Correlation between Vitamin D and Replacement Level and Chemotherapy Results in Lung Cancer

İsmail Beypınar, Murat Araz, Hacer Demir, Mükremin Uysal

Department of Medical Oncology, Afyon University of Health Sciences, Afyon

Objective: Lung cancer accounts for 20% of cancer-related deaths worldwide. Several studies have shown that Vitamin D levels at the time of diagnosis are prognostic in lung cancer. It was determined that post-operative results of lung cancer also showed seasonal changes. It was also observed in cell culture studies that Vitamin D increased platinum-based chemotherapy response in bladder cancer cells. In this study, pre-diagnosis Vitamin D and replacement levels and platinum-based chemotherapy results were evaluated.

Method: In our study, patients diagnosed with lung cancer who were admitted to Oncology Outpatient Clinic of Afyon Kocatepe University in 2012-2018 were reviewed retrospectively and cancer diagnosis and Vitamin D and replacement levels of these patients up to 6 months ago were recorded. Their demographic data, pathological subtypes, treatment modalities, genetic mutations, initial chemotherapy responses, PFS and OS levels were evaluated.

Results: A total of 247 patients were included in our study. Out of the patients included in the study, Vitamin D levels of 152 patients were below 15 ng/ml. 65 patients had a level of 15-30 ng/ml and 29 patients had a level of 30 ng/ml. Out of these patients, 215 had a replacement below 300.000 IU whereas 32 had a replacement above 300.000 IU. No difference was found among these groups, except for Vitamin D levels at the time of diagnosis. It was observed that the replacement level of the group with above three hundred thousand IU was significantly lower at the time of diagnosis. When the patients were evaluated based on their chemotherapy responses in our study, no difference was observed between the patients with below and above 300.000 IU. PFS and OS durations of the patients were evaluated according to both their replacement status and Vitamin D levels at the time of diagnosis. When the Vitamin D levels at the time of diagnosis were categorized as 15 ng/ml and 30 ng/ml, no difference was observed in OS and PFS among the groups. In our study, it was observed that Vitamin D and replacement level at the time of diagnosis did not change the chemotherapy response.

Keywords: Chemotherapy response, lung cancer, prognosis, vitamin D

SB-09

Prognostic Significance of ALBI Score in Liver-Metastatic Colorectal Cancer

Nazım Can Demircan, Osman Köstek

Department of Medical Oncology, Trakya University, Faculty of Medicine, Edirne

Objective: The ALBI (albumin-bilirubin) score is a method that was used in the past to evaluate liver function in hepatocellular carcinoma. Our study aimed to evaluate the prognostic power of ALBI grade/score in patients with liver-metastatic colorectal cancer.

Method: The folders of colorectal cancer patients, who were followed up in our clinic and developed liver metastasis at some point, were reviewed retrospectively and a total of 223 patients were included in the study. Age, albumin, bilirubin, neutrophil / lymphocyte ratio (NLR), lactate dehydrogenase (LDH) and carcinoembryonic antigen (CEA) levels were recorded at the time of the diagnosis of liver metastasis. ALBI score was calculated with the formula (log10 bilirubin x 0.66) + (albumin x -0.085) and evaluated as follow: ≤-2.60 Grade 1, >2.60 and ≤1.39 Grade 2 and >1.39 Grade 3. For LDH and CEA, the upper limit of normal in our center was accepted while ROC curve was established for NLR threshold. Overall survival (OS) was accepted as the span between liver metastasis and final status. Uni- and multi-variate survival analyzes were conducted by adding gender and tumor location.

Findings: The characteristics of the patients are outlined in Table 1. The most predictive NLR value for survival was found to be 2.6 with a sensitivity of 62%. Median OS was found to be 23.9 months in ALBI Grade 1 patients, 16.0 months in Grade 2 patients, and 4.0 months in Grade 3 patients (p<0.001, Fig. 1). In the univariate analysis, age, NLR, CEA, LDH and primary tumor location, except

the ALBI grade, were found to be statistically significant (Table 2). Multivariate analysis revealed that ALBI grade was an independent prognostic factor as well as age, CEA, LDH and primary tumor location (p=0.001, hazard ratio 1.48 for Grade 2, 3.67 for Grade 3).

Conclusion: As a simple and objective method, ALBI score can predict prognosis in liver-metastatic colorectal cancer patients as well.

Keywords: ALBI score, colorectal cancer, prognostic factor

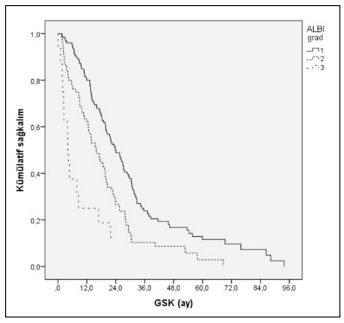


Figure 1. OS: Overall survival

Table 1. Characteristics of patients

CHARACTERISTIC	THE NUMBER OF PATIENTS	PERCENTAGE IN ALL PATIENTS
Gender (Male/ Female)	151 / 72	67.7 / 32.3
Age (<65 / ≥65)	129 / 94	57.8 / 42.2
Primary tumor location (Left colon / Right colon / Transverse colon / Unknown)	177 / 37 / 7 / 2	79.4 / 16.6 / 3.1 / 0.9
LDH (<246 / ≥246 / Unknown)	93 / 119 /11	41.7 / 53.4 / 4.9
CEA (<5 / ≥5 / Unknown)	37 / 156 / 30	16.6 / 70.0 / 13.5
NLR (<2.6 / ≥2.6)	88 / 135	39.5 / 60.5
ALBI Grade (1/2/3)	126 / 81 / 16	56.5 / 36.3 / 7.2

LDH: Lactate dehydrogenase (U/L) CEA: Carcinoembryonic antigen (ng/mL) NLR: Neutrophil / lymphocyte ratio

Table 2. Analysis of prognostic factors

PROGNOSTIC FACTOR	MEDIAN OS (MONTH)	p VALUE IN UNIVARIENT ANALYSIS	HAZARD RATE (95% CI)
Gender (Male/ Female)	20.1 / 18.3	0.17	1.32 (0.91-1.91)
Age (<65 / ≥65)	22.4 / 14.1	0.01	1.69 (1.18-2.41)
Primary tumor location (Left colon / Right colon / Transverse colon)	20.4 / 11.0 / 69.3	<0.001	1.80 (1.13-2.87)
LDH (<246 / ≥246)	23.3 / 16.0	<0.001	1.60 (1.11-2.28)
CEA (<5 / ≥5)	24.0 / 18.8	0.001	1.89 (1.19-3.01)
NLR (<2.6 / ≥2.6)	23.9 / 17.4	0.002	1.33 (0.93-1.89)
ALBI Grade (1/2/3)	23.9 / 16.0 / 4.0	<0.001	1.48 (1.03-2.12) / 3.67 (1.74-7.74)

OS: Overall survival (months) CI: Confidence interval LDH: Lactate dehydrogenase (U/L) CEA: Carcinoembryonic antigen (ng/mL) NLR: Neutrophil / lymphocyte ratio

SB-10

Use of Pegfilgrastim for Prophylaxis of Febrile Neutropenia in Solid Tumors: A Single Center Experience

Fatih Yıldız,[1] Ayşegül İlhan,[1] Emrah Eraslan,[1] Ferit Aslan,[2] Gülnihal Tufan,[1] Berna Öksüzoğlu,[1] Umut Demirci[1]

[1]University of Health Sciences Dr. Abdurrahman Yurtaslan Ankara Oncology, Training and Research Hospital, Ankara; [2]Siirt State Hospital, Siirt

Objective: Pegfilgrastim is a new generation G-CSF with different pharmacokinetics characteristics. In this study, we aimed to evaluate the results of pegfilgrastim use as primary or secondary prophylaxis in solid tumors.

Materials and Methods: Patients who were diagnosed with solid tumor and were treated in November 20016 - July 2018 in Sağlık Bilimleri University, Dr. A.Y. Ankara Oncology Hospital with prophylactic pegfilgrastim were reviewed retrospectively.

Findings: A total of 76 patients were included in the study. Out of these patients, 20 (26.3%) were in the geriatric population (age> 65) and 47 (61.8%) had a diagnosis of breast carcinoma. A majority of the patients (96.1%) were treated with the chemotherapy regimen that was in the middle-risk group for FEN. Primary prophylaxis was used in 88.2% of the patients (n: 67) and pegfilgrastim was used as secondary prophylaxis in 11.8% (n: 9). Four (5.3%) patients developed FEN despite prophylaxis. Afebril neutropenia-induced chemotherapy delay was seen in 3 (3.9%) patients and the neutrophil level returned to normal in 3.3 days in average (3-4 days). Pegfilgrastime-induced bone pain occurred in 13 (17.1%) patients while rash in the injection site was observed in 1 (1.3%) patient.

Conclusion: Pegfilgrastim appears to be a good alternative to chemotherapy-induced neutropenia prophylaxis with low FEN incidence and good tolerability profile.

Keywords: Febrile neutropenia, granulocyte stimulating factor, pegfilgrastim

SB-11

Evaluation of the Nutritional Status of the Patients Before Chemotherapy and After the First Line Treatment: Pamukkale Oncology Department Pilot Study Results

Gamze Gököz Doğu,[1] Umut Çakıroğlu,[1] Sema Taban,[2] Nail Özhan,[1] Serkan Değirmencioğlu,[1] Atike Gökçen Demiray,[1] Arzu Yaren[1]

[1]Department of Medical Oncology, Department of Internal Medicine, Pamukkale University Faculty of Medicine, Denizli, Turkey; [2]Department of Internal Medicine, Pamukkale University Faculty of Medicine, Denizli, Turkey

Objective: The aim of this study was to determine the nutritional status of the patients admitted to Pamukkale University Medical Oncology Clinic and recently diagnosed, and prescribed with chemotherapy, at the time of treatment initiation and after the first line treatment. For this purpose, long version of Mini Nutritional Assessment (MNA) test was applied to patients. Anthropometric measurements were performed and weighing was done using a bioimpedance device that shows body composition. All patients receiving chemotherapy, neoadjuvant, adjuvant, local progression and metastatic, were included.

Results: A total of 83 patients (34 male, 49 female), whose measurements were taken before chemotherapy and after the completion of the first line therapy, were evaluated. Body mass index (BMI) of the patients before chemotherapy was calculated. Classification in the obesity diagnosis and treatment guideline approved by The Society of Endocrinology and Metabolism of Turkey (SEMT) was used. The first six questions of the MNA is called the short version used for screening. When all questions in the MNA are answered, a malnutrition indicator score is obtained. At the end of the evaluations, medical nutrition therapy with enteral product support was initiated for the patients in need. The same tests were re-applied to the patients after the first line treatment. In the pre-chemotherapy evaluation, 63% of the patients were overweight and obese, which was striking, and this rate increased to 68% after the first-line treatment. This was attributed to the fact that the patients started to pay more attention to their nutrition after the detailed questions about their nutrition, which is also affected by the corticosteroids used for premedication purposes before the treatment.

Discussion: In our country, with the increased access to health institutions, diagnosis and treatment opportunities, the incidence of cachectic patients at the time of diagnosis decreased. The data in our study corroborated this. In our country, where obesity is a public health problem, although there is significant weight loss in cancer patients, obesity may cause the BMIs to be within the normal range at the time of diagnosis.

Keywords: Mini nutritional assessment (MNA), obesity, cachexia, medical nutrition therapy, nutrition

SB-12

Detection of Immune-Response-Associated Pathways Involved in Oral Pre-Malignant Lesions and Hyper/ Hypomethylated Immune Genes Involved in these Pathways by Methylation Array Technology

Sena Şen,[1] Begüm Özemek,[2] Gülsüm Ak,[3] Canan Alatlı,[4] Uğur Sezerman,[2] Semra Demokan[1]

[1]Department of Basic Oncology, Istanbul University Oncology Institute, Istanbul, Turkey; [2]Department of Biostatistics and Medical Informatics, Acibadem University, Istanbul, Turkey; [3]Department of Oral and Maxillofacial Surgery Istanbul University Faculty of Dentistry, Istanbul, Turkey; [4]Department of Clinical Oncology, Istanbul University Oncology Institute, Istanbul, Turkey

Objective: DNA methylation is one of the epigenetic mechanisms effective in silencing tumor suppressor genes in carcinogenesis and has been reported to be effective in the development of oral premalignant lesions (OPML), which are among the etiologic factors of oral cavity cancers. In our study [supported by TUBITAK (SBAG-144S497)], using DNA methylation profiling, we aimed to establish the epigenetic gene panel by determining the immunological pathways involved in the development of OPML and the methylation changes of the genes involved in these pathways.

Methods: After obtaining DNA from tumor and equivalent normal tissue samples belonging to 12 OPML patients, bisulfite transformation was performed. Methylation levels of the samples were measured by IlluminaHuman450k Methylation Array technology and examined on the iScan platform. Regions with different methylation levels in the tumor and normal tissues were identified by a code developed in the R program. Identified areas were matched with the corresponding gene names according to the Homo Sapiens reference genome (hg19). In order to find the pathways affected by genes with different methylation levels, pathway analysis was performed by using the method developed by our group, again in the R program. The pathway was filtered using the KEGG databank, and the immune-system pathways affected by DNA methylation regulation were detected.

Results: According to the methylation array analysis, in tumor groups, methylation was observed in the CpG regions of the probes defining the 824 genes. In the OPML patient group, gene panels with DNA methylation level changes (hyper / hypometry) were detected in 7 immune system-associated pathways [T cell receptor signaling pathway, intestinal immune network for IgA production, leukocyte transendothelial migration, natural killer cell-mediated cytotoxicity platelet activation, Fc epsilon RI signaling pathway and B cell receptor signaling pathway ($p<0.05$)].

Conclusion: After pathway analysis, the pathways associated with the immune system and the genes involved in these pathways and with significant methylation changes are thought to play a role in the development of OPML.

Keywords: Epigenetics, immune system, methylation, pre-malignant lesion, signaling pathways

SB-13

Retrospective Evaluation of Olanzapine Efficacy and Safety in AC Regimens

Ayşegül İlhan,[1] Fatih Yıldız,[1] Ferit Aslan,[2] Ömür Berna Çakmak Öksüzoğlu[1]

[1]Department of Medical Oncology, University of Health Sciences Dr. Abdurrahman Yurtaslan Ankara Oncology Training and Research Hospital, Ankara; [2]Department of Medical Oncology, Siirt State Hospital, Siirt

Objective: Nausea and vomiting due to chemotherapy is one of the most worrying side effects for cancer patients. Olanzapine is an atypical antipsychotic agent that has been shown to be effective in the treatment of emesis in the current guidelines. In this study, we planned to retrospectively evaluate the efficacy of antiemetic agents in AC (cyclophosphamide and doxorubicin) regimen.

Methods: Patients who underwent adjuvant AC chemotherapy with the diagnosis of breast carcinoma between March 2018 - August 2018 at the Ankara Oncology EAH Medical Oncology Clinic were evaluated retrospectively. The patients were divided into two groups, those under standard antiemetic regimen (5-HT3 receptor antagonist, dexamethasone and aprepitant) and those using olanzapine in addition to the standard antiemetic treatment. The intensity of the complaints of nausea and vomiting after antiemetic treatment were graded according to CTCAE 4.03 and compared. Olanzapine-associated side effects were evaluated.

Results: A total of 111 patients were included in the study. The number of patients under standard antiemetic treatment was 91 (81.9%) and the number of patients receiving olanzapine in addition to standard antiemetics were 20 (18%). The median age was 56 (28-73 years) in the standard treatment group and 50 (29-74 years) in the olanzapine group. All patients who received olanzapine treatment had grade 3 emesis in the previous chemotherapy cycle despite the standard antiemetic treatment. Nausea was not seen in 15 patients (16.4%) in the standard treatment group and 2 (10%) patients in the olanzapine group. There was no grade 3 emesis in both groups. In all members of the olanzapine group, emesis level decreased compared with the previous cure. When the olanzapine group was compared with the standard treatment group, a significant difference was found in favor of olanzapine between the two groups in terms of grade 1 and 2 emesis (Table 1). In the olanzapine group, 11 patients (55%) had drowsiness and 2 patients (10%) had dizziness.

Table 1.

	Grade 1	Grade 2	Total	P value
Standard Treatment	27	49	76	<0.001
Standard Treatment + Olanzapine	15	3	18	

Conclusion: In our study, olanzapine was found to be more effective in the treatment of emesis than the standard treatment and it seems tolerable in terms of its side effects.

Keywords: AC chemotherapy, emesis, olanzapine

SB-14

Factors Affecting Daily Living Activities of Geriatric Cancer Patients

Ali Alkan

Department of Medical Oncology, Mugla Sitki Kocman University, Mugla

Introduction: The ability to meet daily needs decreases with advancing age. As a result of both the disease and the treatments applied to the elderly patients who are followed up with the diagnosis of cancer, daily living activities are affected. The aim of this study is to evaluate the factors affecting daily living activities of geriatric cancer patients.

Methods: In this study, patients aged 65 years and older who were followed-up in the Medical Oncology outpatient clinic were evaluated using face-to-face interview method. In addition to demographic and disease characteristics, a questionnaire that included Lawton–Brody Instrumental Activities of Daily Living Scale (IADL) was applied.

Results: 129 patients aged 65 years and older were evaluated in the study. When the IADL scores were evaluated it was found that IADL scores were higher in those under 75 years, those who do not have any children, and those with an education equal to or greater than primary school level. In multivariate analysis; having an education equal to or greater than primary school was associated with increased IADL scores. (OR: 8.4, 1.6 44.0, 95% CI, p=0.012).

Conclusion: In our study, it has been found that as higher level of education in geriatric cancer patients is a prominent determinant of functional independence.

Keywords: daily living activity, cancer, geriatric

SB-15

The Relationship Between Pathological Complete Response and Ki 67 Index in Patients with Locally Advanced Breast Cancer Receiving Neoadjuvant Chemotherapy: Retrospective Single Center Experience

Caglayan Geredeli, Serdar Arıcı, Abdullah Sakin, Nurgül Yaşar, Şener Cihan

Department of Medical Oncology, Health Sciences University Okmeydanı Training and Research Hospital, Istanbul, Turkey

Objective: Neoadjuvant chemotherapy (NAC) improves overall survival and enables breast-conserving treatment in locally advanced breast cancer. The correlation between Ki-67 and pathological complete response (PCR) is controversial. METHODS: Patients who received neoadjuvant chemotherapy between 2010 and 2017 were included in the study. We investigated the correlation between Ki-67 levels obtained prior to NAC and pathological complete response after NAC.

Results: A total of 157 patients participated in this study. The median age was 49 (25-83) in stage 2 group and 52 (23-76) in stage 3 group. The mean Ki-67 level was 38 (1 (90) in patients with stage 2 breast cancer (n=108) and 35 (2-95) in those with stage 3 breast cancer (n=59). There was no statistically significant correlation between Ki-67 levels and pathological complete response in stage 2 and stage 3 groups (p=0.213, 0.533, respectively). The mean level of Ki-67 was 33 in patients with PCR in stage 2, and 41 in patients without PCR. This difference was not statistically significant (p=0.079). The mean level of Ki-67 was 44 in patients with PCR in stage 3 group and 31 in patients without PCR. This difference was not statistically significant (p=0.236).

Conclusion: In our study, there was no correlation between Ki-67 and PCR, but the results in the literature are still controversial and randomized controlled studies are needed to determine the correlation.

Keywords: Breast cancer, neoadjuvant chemotherapy, Ki 67

SB-16

Nicotiana Rustica and Cancer

Erdinç Nayır,[1] Ali Murat Sedef[2]

[1]Department of Medical Oncology, Mersin Medicalpark Hospital, Mersin;
[2]Deparment of Medical Oncology, Tarsus Medicalpark Hospital, Mersin

Objective: There are no studies on the correlation between "Nicotiana rustica", with names such as 'Maraş grass', 'smokeless tobacco', 'mouth grass' which are frequently consumed in Kahramanmaraş and its surroundings. Maraş grass is a tobacco product obtained by mixing the leaves of Nicotiana rustica Linn plant after processing it into powder with oak or walnut ashes and mildly humidifying in copper boilers. The nicotine content of tobacco used in the making of Maraş grass is 6-10 times higher than the nicotine content of tobacco used in cigarette making. This study was carried out to raise awareness about Maraş grass' correlation with cancer.

Materials and Methods: Patients who were admitted to the Medical Oncology outpatient clinic of K.Maraş Necip Fazıl City Hospital between 2016-2017 were included in the study. Patients' age, gender, literacy, cancer subtype, stage, status of using Maraş grass, cigarette, and alcohol and if so, the duration and amount of use were recorded.

Results: 204 patients were included in the study. Of these patients, 59.8% of the patients were between 50-70 years old, 52% were male, 48% were female, 77.5% were illiterate, 43% were stage 3, and 34% were stage 4. The most common cancers among the patients were breast, colon and gastric cancer. 32.4% of the patients (n = 66) used Maraş grass. Of these patients, 38% consumed the grass for more than 20 years, 39% consumed 5-10 times a day, the majority were male and 42% were illiterate. The diagnoses of those using Maraş grass is given in.

Conclusion: Although there is a smoking ban in closed areas, there is no control over the use of Maraş grass. There is even the perception in the region that it helps quitting smoking. In the literature, there are no comprehensive epidemiological studies demonstrating the relationship between Maraş grass and cancer. There are case reports about oral lesions. There is a need for increased awareness and epidemiological studies about this subject.

Keywords: Maraş grass, mouth grass, tobacco

SB-17

Immunotherapy-Associated Pneumonitis Cases: Single Center Experience

Ali Gökyer, Ahmet Küçükarda

Department of Medical Oncology, Trakya University, Edirne

Immunotherapy has provided a significant improvement in the treatment of advanced stage cancer patients. Immunotherapy-associated pneumonitis is a rare complication, with an incidence around 5%. The disease is difficult to diagnose and has a high morbidity. For this reason, the awareness of oncologists should be increased.

We evaluated the data of 77 patients at metastatic stage, with different histological diagnoses, and receiving immunotherapy in the clinical studies in our center. We found 7 cases of immunotherapy-associated pneumonia. Clinical characteristics of patients are given in Table1, their radiological imaging results are given in Picture1. All patients had respiratory problems and radiological changes. The cycle at which pneumonitis developed had heterogenous distribution (3rd-52nd cycles). The median therapy time for pneumonitis development was 30 days (11-127 days). Grade 4 pneumonitis was observed in only one of the 7 patients, and the patient was administered with Mycophenolate mofetil (MMF), steroid and antibiotics for treatment. Follow-up was performed under intensive care conditions with mechanical ventilation support. At the end of 30 days, radiological and clinical improvement was achieved. One patient with grade 1 pneumonitis improved with follow-up alone, and 2 patients recovered with antibiotic therapy alone. In a patient with a pneumonitis duration of 127 days, recovery-exacerbation periods and mobile radiological symptoms were observed. Immunotherapy was discontinued in three patients due to grade 3-4 pneumonitis. They were excluded from the study. The other 4 patients continued to receive immunotherapy after the completion of pneumonitis treatment.

Early diagnosis of pneumonitis in patients undergoing immunotherapy in oncology practice is very important in terms of severe morbidity and mortality. With the widespread use of immunotherapy, we will face more patients with pneumonitis. Patients with symptoms such as cough and dyspnea should be evaluated with care by the clinician because of the difference in presentation of clinical and radiological findings in the diagnosis of the disease. We aimed to increase the awareness on this subject by conveying the experiences acquired in our center.

Keywords: Immunotherapy, pneumonitis, steroid

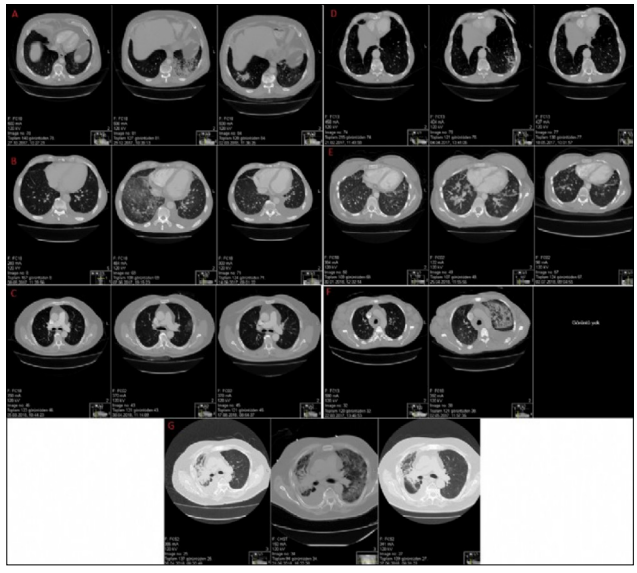


Figure 1. Radiological imaging of pneumonitis patients

SB-18

The Clinical Significance of Serum 25 (OH) Vitamin D Levels at the Time of Diagnosis in Small Cell Lung Cancer

Serkan Değirmencioğlu, Gökçen Demiray, Gamze Gököz Doğu, Arzu Yaren

Department of Medical Oncology, Pamukkale University, Denizli

Objective: While Vitamin D is associated with common diseases such as obesity, diabetes, hypertension, recent studies have demonstrated the association between vitamin D deficiency and high prevalence breast, non-small cell lung, prostate and colon cancers. Serum vitamin D levels lower than 20 ng/ml is defined as deficiency. In our study, we compared vitamin D levels between small cell lung cancer and healthy control group.

Materials and Methods: The study included 36 patients with small cell lung cancer who were followed-up and treated in Pamukkale University Medical Oncology Clinic between 2017-2018 and 36 healthy controls who matched the experimental group in terms of gender, age and the date of testing for serum vitamin D levels.

Results: While the disease was limited in 8 of the cases with small cell lung cancer (22.2%), it was advanced in 28 cases (77.2%). Age and laboratory parameters of small cell lung cancer patients and control group were compared in Table-1. No significant difference was observed in terms of the parameters when limited disease and advanced stage disease were compared.

Conclusion: Serum vitamin D, which plays a role in the calcium balance and immune system regulation, also exhibits properties such as anti-proliferative, apoptotic, anti-angiogenic and anti-inflammatory effects, and affects DNA repair. Although the correlation between vitamin D deficiency and the risk of non-small cell lung cancer has been described in the literature, our study is the first to show that serum vitamin D deficiency may also play a role in the pathogenesis of small cell lung cancer. However, it should be supported by multi-center studies and high case numbers.

Keywords: Lung cancer, small cell, vitamin d

Table 1. Comparison between small cell lung cancer and control group

	Age	vitamin d	Calcium	Phosphorus
Akc ca	60.44±7.91	13.24±7.17	9.53±0.64	3.46±0.81
Control	62.73±8.02	23.77±10.36	8.81±0.91	3.9±1.06
p	0.6	0.0001	0.001	0.066

SB-19

The Correlation Between Pre-Treatment Inflammatory Indexes and Survival in Patients with Stage III Colorectal Cancer Receiving Adjuvant Therapy

Oktay Bozkurt

Department of Medical Oncology, Erciyes University Faculty of Medicine, Kayseri

Objective: Systemic inflammation plays an important role in tumor growth. Neutrophil lymphocyte ratio (NLR), platelet-lymphocyte ratio (PLR) and systemic immune inflammation index (SII) are the simple methods that can be used to evaluate the host inflammatory response. The aim of this study is to investigate the prognostic importance of pre-treatment NLR, PLR and SII in colorectal cancer (CRC) patients receiving adjuvant therapy.

Methods: A total of 166 patients with stage III colorectal cancer treated with curative therapy were evaluated retrospectively. Univariate and multivariate analysis was performed to determine the potential determinants of disease-free survival (DFS) and overall survival (OS).

Results: According to the threshold values determined by ROC analysis, each of the NLR (<2.7 and ≥2.7), PLR (<172 and ≥172) and SII (<761 and ≥761) were divided into two groups. The 5-year DFS of the groups with high NLR, PLR, and SII levels were significantly lower than those with low levels (5 year-DFS was, 93% vs. 43%; p<0.001, 85% vs. 49%; p<0.001, 90% vs. 43%; p<0.001, respectively) (Fig. 1-3). In univariate analysis, high NLR, PLR, perforation and SII were found to be significantly correlated with shorter DFS, and high NLR, PLR and SII were found to be significantly correlated with shorter OS. In multivariate analysis, NLR was found to be an independent predictor for DFS (HR 4.68, p=0.002) and OS (HR 2.61, p=0.039) (Table 1, 2).

Conclusion: In this study, it was found that high NLR, PLR and SII were indicative of shorter DFS and OS in stage III CRC patients. In addition, multivariate analysis showed that pre-treatment high NLR had independent prognostic value for shorter DFS and OS. Pre-treatment inflammatory indices may be effective parameters in predicting the survival of CRC patients receiving adjuvant therapy.

Keywords: Colorectal cancer,iInflammation, prognosis

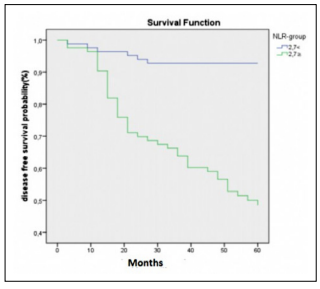


Figure 1. Five-year disease-free survival rate according to NLR in stage III CRC patients (p<0.001).

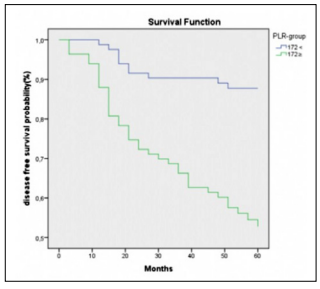


Figure 2. Five-year disease-free survival according to PLR in stage III CRC patients (p<0.001).

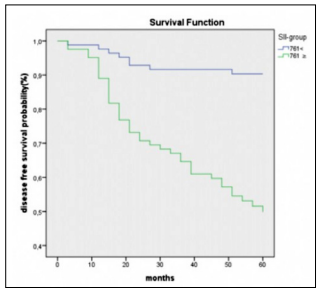


Figure 3. Five-year disease-free survival in patients with stage III CRC according to SII (p<0.001).

Table 1. Univariate and multivariate analysis for disease-free survival in stage III CRC

Variables	Univariate p- value	Multivariate HR, 95% CI	Multivariate p- value
Age (≥60 years vs <60 years)	0.52	-	-
Localization (Colon vs Rectum)	0.11	-	-
Number of extracted lymph nodes (<12 vs ≥ 12)	0.59	-	-
Depth of invasion (pT1-3 vs pT4)	0.62	-	-
Perineural invasion (Yes vs No)	0.80	-	-
Perforation (Yes vs No)	0.02	1.68 (0.75-3.78	0.20
Obstruction (Yes vs No)	0.29	-	-
Lymphovascular invasion (Yes vs No)	0.63	-	-
NLR (High / Low)	<0.001	4.68 (1.78-12.3)	0.002
PLR (High / Low)	<0.001	1.81 (0.83-3.93)	0.13
SII (High / Low)	<0.001	1.68 (0.75-3.78)	0.09

Table 2. Univariate and multivariate analysis for overall survival in stage III CRC

Variables	Univariate p- value	Multivariate HR, 95% CI	Multivariate p- value
Age (≥60 years vs <60 years)	0.86	-	-
Localization (Colon vs Rectum)	0.16	-	-
Number of extracted lymph nodes (<12 vs ≥12)	0.19	-	-
Depth of invasion (pT1-3 vs pT4)	0.70	-	-
Perineural invasion (Yes vs No)	0.87	-	-
Perforation (Yes vs No)	0.06	-	-
Obstruction (Yes vs No)	0.30	-	-
Lymphovascular invasion (Yes vs No)	0.56	-	-
NLR (High / Low)	<0.001	2.61 (1.05 to 6.50)	0.039
PLR (High / Low)	<0.001	1.90 (0.88-4.10)	0.10
SII (High / Low)	<0.001	2.15 (0.83-5.56)	0.11

SB-20

Comparison of Systemic Therapies in Metastatic Biliary Tract Cancer: The First Network Meta-analysis Study

Hakan Bozcuk, Hasan Mutlu

Department of Medical Oncology, Medical Park Hospital, Antalya

Objective: The order of efficacy of systemic treatments in advanced biliary tract cancer is unclear. There are no comparisons between most of the treatment options. Systemic treatments in the literature are compared using Bayesian methods.

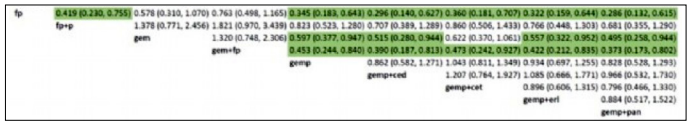
Methods: The randomized clinical trials in the literature were compared using Bayesian Network Meta-analysis method. First-line systemic treatment studies for advanced stage biliary tract cancer in Pub-Med and online databases were included in the analysis. Hazard Ratio logarithm was used for overall survival, relative effect chart was generated and the probabilities of the sequence of treatments were calculated.

Results: Ten clinical studies and the data of 1143 patients were included in the analysis. Gemcitabine + Platinum treatment was found to be superior to Gemcitabine, Gemcitabine + Fluoropyrimidine, and Fluoropyrimidine treatments. Fluoropyrimidine + platinum treatment was more effective than fluoropyrimidine treatment. Gemcitabine + Platinum + Panitumumab and Gemcitabine + Platinum + Cediranib treatments are likely to be the most superior treatments.

Discussion: Platinum-containing combinations provide the best survival in the treatment of advanced stage biliary tract cancer. Agents such as Cediranib and Panitimumab do not contribute significantly to the treatment results.

Keywords: Biliary tract cancer, chemotherapy, Network meta-analysis

Table 1. Hazard ratio comparison of biliary tract cancer treatment in terms of overall survival (95% CI).



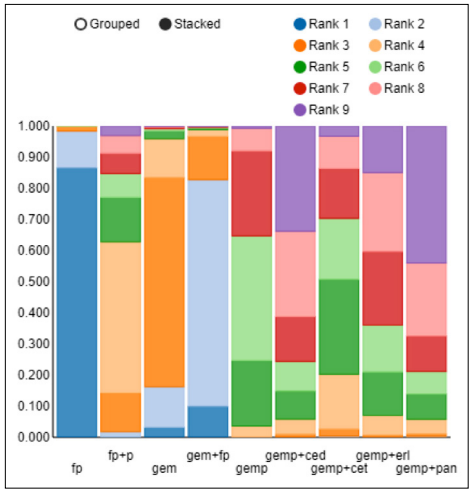


Figure 1. Treatment efficacy ranking

Table 1. Clinical and pathological characteristics of patients

Characteristics, n (%)	Recurrent metastatic	De novo metastatic	P value
Age	47 (30-61)	50.5 (32-71)	0.22
Menopause status			
premenopausal postmenopausal	20 (83.3) 4 (16.7)	14 (70) 6 (30	0.47
Histology			
inv.ductal Others	23 (95.8) 1 (4.2)	19 (95) 1 (5)	1.00
Histological Grade			
I II III	6 (25) 12 (50) 6 (25)	5 (25) 8 (40) 7 (35)	0.73
Hormone receptor status			
Positive Negative	16 (69.6) 7 (30.4)	15 (75) 5 (25)	0.69
ECOG at the time of metastasis			
0-1 ≥2	21 (87.5) 3 (12.5)	17 (85) 3 (15)	1.00
Brain metastasis			
Positive Negative	6 (25) 18 (75)	5 (25) 15 (75)	1.00

SB-21

Clinical and Prognostic Features of HER-2 Positive Metastatic Breast Cancer Patients: A Single Center Experience

Yusuf Açıkgöz, Yakup Ergün, Gökhan Uçar, Doğan Uncu

Ankara Numune Training and Research Hospital, Ankara

Introduction: While 5% of breast cancer patients are metastatic at the time of diagnosis, recurrent metastatic disease develops in 20-30% of patients who are operated. There are different results in the literature regarding the effect of de novo or recurrent occurrence of metastatic disease on GS. We retrospectively investigated the clinicopathological and prognostic characteristics of HER-2-positive de novo and recurrent metastatic breast cancer patients.

Materials and Methods: Data of HER-2 positive de novo and recurrent metastatic breast cancer patients who applied to our clinic between 2007-2017 were analyzed retrospectively. The differences between the two groups were analyzed by pearson chi-square test. Survival analysis was analyzed with the Kaplan Meier method, using the Long-rank test.

Results: A total of 44 patients participated in our study. There were 20 patients in the de novo metastatic group and 24 patients in the recurrent metastatic group. The median age of all patients was 47 (30-71) and 77% of the patients were premenopausal. There was no difference between the groups in terms of clinical and pathologic features (Table 1). The progression-free survival of the patients in the first line was 14.2 months and there was no significant difference between the de novo and recurrent metastatic patient groups (16.8 months vs 10.7 months, respectively; p = 0.6). The median follow-up period was 32.7 months (1.2-112). The median OS of all patients was 52.4 months (95% CI 38.6-66.2). The median OS in de novo and recurrent metastatic disease was 60.3 months and 43.9 months, respectively, and the difference was not statistically significant (HR: 0.87, 95% CI 0.37-2.05, p=0.76).

Conclusion: In our study, there was no statistically significant difference between the median overall survival of patients with de novo metastatic and recurrent metastatic HER-2 positive breast cancer. It was found that de novo development or recurrent appearance of the metastatic tumor does not change the response to treatment.

Keywords: De novo, Her-2 positive, metastatic breast cancer, recurrence

SB-22

Retrospective Analysis of Patients Diagnosed with Multiple Myeloma: Single Center Experience

Melih Simsek,[1] Pınar Tarkun,[2] Abdullah Hacıhanefioğlu[2]

[1]Yozgat City Hospital, Yozgat; [2]Department of Internal Medicine, Department of Hematology, Kocaeli University, Kocaeli

Objective: Multiple myeloma is a hematologic malignancy characterized by uncontrolled proliferation of plasma cells. Various options in the treatment of multiple myeloma require better identification of patients and standardization of treatments. The aim of this study is to evaluate the treatment responses of multiple myeloma patients and to investigate the relationship between the treatment responses and clinical findings.

Materials and Methods: The clinical and laboratory findings and survival and treatment response data of 151 multiple myeloma patients diagnosed between the period 2000-2011 were analyzed retrospectively.

Results: The most preferred treatment was Melphalan-Prednisolone (45%), followed by Vincristine-Adriamycin-Dexamethasone (21.3%) and Bortezomib-Dexamethasone (10%). Of the patients with a history of at least 1 remission, 22.35% were lost. This rate was found to be 77.35% in patients without remission (p=0.000). In stage III disease, the remission rate significantly decreased (p=0.008) and the mortality risk significantly increased (p=0.000) compared with earlier stages. Autologous bone marrow transplantation significantly reduced the risk of recurrence (p=0.009) and mortality risk (p=0.001). When the treatment schedules were evaluated, the remission rates were found to be% 25.9 with with Vincristine-Adriamycin-Dexamethasone treatment followed by Bortezomib-Dexamethasone treatment, 33.3% with Melfalan-Prednisolone, 29.2% with bortezomib, 9.4% with thalidomide, 23.8% with lenalidomide and 25.7% with Vincristine-Adriamycin-Dexamethasone treatment. Of the 101 patients with remission, 23 were given low-dose lenalidomide treatment and 21 patients were referred to autologous bone marrow transplantation. The recurrence rate was found to be significantly lower in patients treated with low-dose lenalidomide (p=0.002).

Conclusion: The highest rates of remission were achieved with the treatment of Vincristine-Adriamycin-Dexamethasone followed by Bortezomib-Dexamethasone. Autologous bone marrow transplantation treatment resulted in lower recurrence and mortality rates. Patients with low-dose lenalidomide treatment had lower mortality and recurrence rates.

Keywords: Autologous stem cell transplantation, epidemiology, lenalidomide, multiple myeloma

SB-23

Is Pazopanib-Induced Hypotension a Predictive Marker in Metastatic Soft Tissue Sarcomas Treated with Multiple Lines of Therapy?

Teoman Şakalar, Ender Doğan, Sümeyra Derin, Mevlüde İnanç, Metin Özkan, Oktay Bozkurt

Department of Medical Oncology, Erciyes University Medical Faculty, Kayseri

Introduction: Pazopanib is widely used in the treatment of soft tissue sarcomas (STS). It has been shown that the development of pazopanib-associated side effects are correlated with the response to treatment. The main aim of this study is to investigate whether the development of hypertension during pazopanib treatment in STS patients is correlated with a better response to treatment.

Methods: A total of 23 STS patients treated with pazopanib between December 2008-February 2018 were evaluated retrospectively. OS and PFS were calculated using Kaplan-Meier method. Multivariate Cox proportional risk models were used to analyze the prognostic effect of treatment-related adverse events (AEs).

Results: 13 patients were female (57%) and 10 patients were male (43%) among the 23 patients included in the study.The median age was 54 (range 25-70 years).12 of the patients (52%) had leiyomyosarcoma subtype, 5 (21%) had pleomorphic sarcoma subtype, 3 (13%) had fibrosarcoma subtype and 3 (13%) had lower synovial sarcoma subtype. 10(43%) of the patients received pazopanib on the second rank, 11 (47%) of the patients received it on the third rank and 2(8%) of the patients received it on the fourth rank. The overall survival of mYDS patients who received pazopanib treatment was found as 9 months and their progression-free survival was found as 6 months. Hypertension progressed in 11(47%) patients during pazopanib treatment. Although the progression-free survival (PFS) was found to be longer in the patients in whom hypertension progressed than the patients in whom hypertension did not progress, any statistical significance could not be achieved (PFS;12 vs 5 months, p=0.073)(Fig. 1). However, the overall survival was found to be statistically and significantly longer in the patients in whom hypertension progressed than the patients in whom hypertension did not progress. (OS:21 vs 6 months, p=0.035). (Fig. 2)

Conclusion: Although there has been an increase in general and progression-free survival through the use of target-oriented treatments in mYDS within the studies conducted, markers are required in order to detect patients with the highest probability of benefiting from tyrosine kinase inhibitors. Patients will be selected for the target-oriented therapies in compliance with the main clinicopathologic factors of the patients until these markers are prospectively confirmed. It was found that progression of hypertension depending on the treatment was associated with longer PFS and OS in this study.

Keywords: Hypertension, pazopanib, soft tissue sarcoma

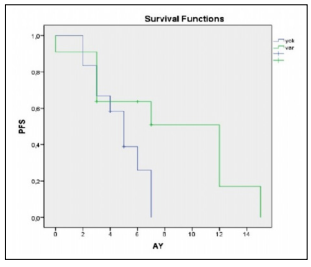


Figure 1. Disease-free survival and overall survival curves in patients with and without hypertension

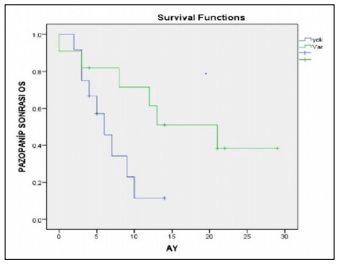


Figure 2. Disease-free survival and overall survival curves in patients with and without hypertension

SB-24

Examination of Biological Activities of Photosensitizers that Will be Specifically Activated in Tumor

Asiye Gök Yurttaş,[1] Tuğba Elgün,[2] Süleyman Nezih Hekim[3]

[1]Department of Molecular Biology and Genetics, Biruni University, Faculty of Engineering and Natural Sciences, Istanbul; [2]Department of Histology and Embryology, Biruni University Faculty of Medicine, Istanbul; [3]Department of Biochemistry, Cumhuriyet University Faculty of Medicine, Sivas

Objective: Photodynamic therapy (PDT) is a dual treatment method which includes a combination of visible light and photosensitizers. The photosensitizers synthesized on the basis of PDT indicate minimal toxicity in the dark as well as they form singlet oxygen and kill cancer cells when they are treated with light. Today, research focuses on the accumulation of photosensitizer in tumor and their effect on tumor region. Therefore, the amount of photosensitizer applied can be reduced and it can be prevented to harm healthy cells in the irradiated region. The objective of our study is to develop photosensitizers which are activated peculiarly to the tumor region. Photosensitizers kill cancer cells by benefiting from the aggregation-induced extinction feature of dimeric photosensitizers bound to the disulfide bridges and by being activated through disulfide bridges being broken via antioxidant feature of glutathione when they reach the cancer cells.

Method: Photosensitizers were undergone the procedure of liposom and they were characterized based on their size, distribution index and zeta potential. The effects of photosensitizers with liposome on the cell viability applied in cancer cell lines were checked for percantage of viability through MTT test in the light and in different concentrations. Moreover, the effects of the substances applied to the cells on apoptosis and necrosis were examined so as to observe the effects of the selected dosage.

Results and Conclusion: The size of the photosensitizers with liposom was found to be in the range of 150-210 nm. The distribution index was less than 0.5 and indicated the desired narrow distribution. Zeta potential resulted between the range of -7 and -1 mW, since the H+ ion is determinant in several systems. It was found that 20% rate of death was observed in the death reference at the rate of 80% for photosensitizers in 5j/cm^2 of light toxicity and in 5 µM of concentration through MTT test as well as the desired results were achieved. Although the photosensitizers with synthesized liposomes are harmless in healthy cells and cancer cell lines in dark environment, it is thought that they can be used in cancer treatments since they are toxic at 5j/cm^2 dose of light.

Keywords: Activation peculiar to tumor, breast cancer, disulfide bridge, liposome, phthalocyanine, photodynamic therapy

SB-25

A First Preliminary Report: Potential Role of Soluble GITR, Ox40L and CD40L as Inflammatory Biomarkers in Patients with Gastric Cancer

Cem Horozoğlu,[1] Dilara Sönmez,[2] Şeyda Ercan,[2] Soykan Arikan,[3] Canan Kelten Talu,[4] Mehmet Tolgahan Hakan,[5] Özlem Küçükhüseyin,[2] İlhan Yaylım[2]

[1]Medical Laboratory Techniques, Vocational School of Health Services, Istanbul Gelisim University, Istanbul, Turkey; [2]Department of Molecular Medicine, Aziz Sancar Institute of Experimental Medicine / Istanbul Medical Faculty of Istanbul University, Istanbul, Turkey; [3]Department of General Surgery Istanbul Training and Research Hospital, Istanbul, Turkey; [4]Department of Pathology, Istanbul Training and Research Hospital, Istanbul, Turkey; [5]Department of Biology, Hitit University Faculty of Arts, Corum, Turkey

Objective: The protein associated with the receptor family of the glucocorticoid-induced tumor necrosis factor (GITR) and CD40-CD40 ligand (CD40L) belong to the TNFR superfamily. OX40L is also expressed on the surface of activated T cells that further enhance T cell responses. It is on the agenda to investigate the multiple effects of these molecules that jointly trigger carcinogenesis in inflammatory pathways.

Material and Method: Blood samples were taken from 18 patients in the different stages of gastric cancer and 19 healthy individuals in the control group matched based on age and gender. Plasma sGITR, sOx40L and sCD40L concentrations were measured via quantitative ELISA test.

Results: All patients with gastric cancer had significantly higher levels of sGITR (p=0.014) and sOx40L (p=0.033) than healthy individuals. The fact that the region under the curve was 0.734 for the receptor-operator curve (ROC) for patients with gastric cancer showed its efficacy as an inflammatory marker for sGITR.

Conclusion: We think that sOX40L and sGITR levels might be important factors for the risk of gastric cancer in our study. The importance of sGITR levels for a new successful immunotherapy regime should be investigated in the future. Further analysis is recommended to be conducted with larger groups to find the possible correlations between these molecules and the risk of gastric cancer.

Keywords: CD40L, gastric cancer, GITR, OX40L

SB-26

Metastatic Choroidal Melanoma: Single Center Experience

Burak Yasin Aktaş,[1] Gürkan Güner,[1] Metin Demir,[1] Deniz Can Güven,[1] Oktay Halit Aktepe,[1] Ertuğrul Çağrı Bölek,[2] Saadettin Kılıçkap,[1] İsmail Çelik[1]

[1]Hacettepe University, Cancer Institute, Ankara; [2]Department of Internal Diseases, Department of Rheumatology, Hacettepe University, Ankara

202 choroidal melanoma cases for which were admitted to Department of Medical Oncology of Hacettepe University between January, 2010 and June, 2018 were retrospectively examined in this study. The mean age of the group was 57 and 51% of the group were male. SBRT treatment for primary lesion was administered to 147 of the patients and 69 patients in total underwent enucleation procedure.

Metastasis was detected in the follow-up of 31 patients. The period which passed between primary diagnosis and metastasis was averagely 30 months (0-105 months). Three patients were metastatic at the time of diagnosis. The most common initial focus of metastasis was the liver (n=28).

24 patients underwent chemotherapy, 4 patients underwent surgery and 3 patients were followed-up through support treatment within the treatment of mestatic patients in stage 1. 15 patients received temozolamide, 3 patients received cisplatin, 3 patients received cisplatin-temozolamide, 3 patients received sispaltin-dacarbazine and 2 patients received carboplatin-paclitaxel in the stage 1. 12 of the 18 patients who received treatment in the stage 2 received ipilimumab therapy. The most frequently applied local treatments were radioembolization (n=8), chemoembolization and surgery during the follow-up periods.

The median overall survival of the metastatic patient group was detected as 17 months.

Choroidal malignant melanoma is a rare disease where there are curative treatment opportunities for primary. However, the standard treatment approach in the metastatic patient group has not been clarified yet and this group has poor prognosis. The rates of median overall survival have been reported between 4-20 months in different series in the literature. New studies are required so as to determine a standard treatment in this patient group.

Keywords: choroidal melanoma, temozolamide, immunotherapy

SB-27

Multimodal Treatment Efficacy in Malignant Peripheral Nerve Sheath Tumors

Yusuf Karakas,[1] Ömer Dizdar,[2] Kemal Kösemehmetoğlu,[3] Gökhan Gedikoğlu,[3] Figen Söylemezoğlu,[3] Utku Burak Bozbulut,[2] Metin Demir,[2] Alev Türker,[2] Ayşe Kars[2]

[1]Department of Medical Oncology, Hakkari State Hospital, Hakkari; [2]Department of Medical Oncology, Cancer Institute of Hacettepe University, Ankara; [3]Department of Pathology, Hacettepe University Faculty of Medicine, Ankara, Turkey

Objective: Malignant peripheral nerve sheath tumor (MPNST) is an uncommon tumor with quite poor prognosis and approximately half of the patients have neurofibromatosis type 1. The knowledge on MPNST in the literature is limited. We tried to determine the treatment efficacy administered to patients with MPNST and PD-L1 expression in our study.

Methods: 27 patients diagnosed with MPNST in Hacettepe University between the years of 2000-2016 were evaluated. Tumor characteristics, survival data, treatment modalities of patients were examined. PD-L1 expressions of tumor preparations were reviewed.

Results: The median age of the patients was 36 (19-89). Median tumor diameter was 8.7 cm and 62% of them were high-grade. Tumor localization was in trunk at the rate of 48%, in limb at the rate of 41% as well as head and neck region at the rate of 11%. Only 2 (7%) patients were metastatic at the time of diagnosis. Seven (26%) patients had accompanying NF1 and it was associated with poor prognosis (p=0.056). Most of the patients (96.3%) underwent surgery and R0-R1 resection could be applied in 70% of them. The median follow-up period was 16 months (1-178 months). relapse was observed in 16 (59%) patients during follow-up of them (44% local, 15% remote region). The 3-year-disease-free survival (DFS) rates based on R0-R1 and R2 were respectively 57% and 17% (p<0.001). 48% of the patients received adjuvant therapy after surgery. Two (7%) patients received only chemotherapy (CT), 5 (19%) patients had only radiotherapy (RT) and 6 (22%) patients received both CT and RT. DFS peripd of the patients who received both RT and CT were significantly longer than those who received RT or CT and did not receive any adjuvant therapy (3-year DFS rates were respectively 100%, 14% and 44%, p=0.003) (Fig. 1). PDL-1 expression was positive in 5 of 13 patients (38%) evaluated and any relationship of PDL-1 expression with DFS was not found.

Conclusion: It was seen that multimodal treatment including surgery, CT and RT increased the DFS in MPNST patients. Any relationship between PDL-1 expression and survival was not found.

Keywords: Malignant peripheral nerve sheath tumor, multimodal treatment, PDL-1

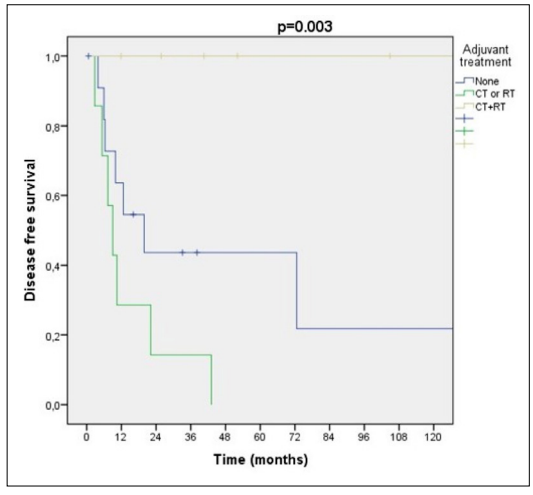


Figure 1. Periods of DFS through adjuvant therapy (CT: chemotherapy, RT: radiotherapy)

SB-28

Frequency of Comorbid Diseases in Patients with Breast Cancer

Esin Oktay

Adnan Menderes University, Aydın

Objective: Breast cancer is the most common type of cancer in women worldwide. It is more common at age 40 and above. Although the etiology of breast cancer is unknown, many risk factors have been identified. Obesity, use of alcohol and cigarette have been associated with breast cancer, especially in postmenopausal women. The frequency of other comorbid disesases in patients with breast cancer except obesity was examined in this study.

Material and Methods: Data of 103 patients diagnosed with early stage breast cancer who applied to the oncology outpatient clinic between 2012 and 2014 were retrospectively collected.

Results: The median age was 54, when the data of 103 patients were examined. Comorbid disease was observed in 49% of the patients. Diabetes Mellitus Type 2 was in the prevalence of 22.3%, Hypertension was in the prevalence of 34%, Coronary Artery Disease was in the prevalence of 4.9%, and Hypothyroidism was in the prevalance of 4.9%. Comorbid diseases were the most commonly detected between the ages of 35-65. Hypertension was the most common in patients over 65 years. There was a statistically significant difference between hypertension and age. Patients were classified based on their stage of disease. However, there was not any statistical difference.

Conclusion: Demographic evaluation of patients with breast cancer in terms of common diseases in the community was carried out in our study. We found out that Diabetes Mellitus type 2 and hypothyroidism were more common in breast cancer patients than in normal population in accordance with the literature. It is thought that Diabetes Mellitus type 2 may be associated with breast cancer due to its association with obesity, the fact that physical activity decreases in postmenopausal period, use of hormonal treatments and the fact that alcohol intake increases. For the mechanism of hypothyroidism in breast cancer, it is thought that iodine-dependent membrane transport mechanism in both thyroid and breast tissue, TSH receptors in adipose tissue and various endocrine stimulations excreted by thyroid tissue activate normal breast tissue and this mechanism interacts with thyroid antibodies via the receptors in breast cancer tissue. The prevalence of hypertension was not associated with stage. Comprehensive and prospective studied are required to confirm the results.

Keywords: Breast cancer, comorbid disease, early stage

SB-29

Evaluation of Efficacy, Safety Data and relapse Pattern of Definitive Chemoradiotherapy in Non-Small Cell Lung Cancer; Single Center Experience

Özlem Ercelep,[1] Özkan Alan,[2] Tuğba Akın Telli,[2] Tuğba Tüylü,[2] Nalan Babacan,[1] Serap Kaya,[1] Faysal Dane,[2] Mustafa Adli,[3] Fulden Yumuk[2]

[1]Department of Medical Oncology, Marmara University Pendik Training and Research Hospital, Istanbul; [2]Department of Medical Oncology, Marmara University Faculty of Medicine, Marmara University Pendik Training and Research Hospital, Istanbul; [3]Department of Radiation Oncology, Marmara University Faculty of Medicine, Marmara University Pendik Training and Research Hospital, Istanbul

Objective: Concomitant chemoradiotherapy is the standard treatment for the stage 3 patients who are inappropriate for the operation. The aim of our study was to evaluate the efficacy, toxicity and relapse pattern aftr treatment of definitive chemoradiotherapy (CRT) in non-small cell lung cancer (NSCLC).

Method: The data of 82 patients diagnosed with stage 3 NSCLC who underwent concurrent chemoradiotherapy between 2008 and 2017 were retrospectively evaluated. Patients who received chemotherapy before or after CRT and underwent surgical operation were excluded from the study.

Results: The mean age of the patients was 58.5 (27-83), 88% of them were male(72/82) and 86.6% of them had smoking history (71/82). The median follow-up period was 17.5 months, median pfs 9 months, median os 23 months, 1-year- and 2-year-os was 71% and 46%. 50 patients (61%) had squamous cell, 22 patients (27%) had adenocarcinoma and 10 patients (12%) had NSCLC, when we examined the histologic subtype distribution. Chemotherapy schemes used simultaneously with RT; Cisplatin + Etoposide was in 68 patients (82%), Carboplatin + Etoposide was in 6 patients (7.3%), Cisplatin was in 5 patients (6%), Carboplatin + Paclitaxel was in 4 patients (5%) on a weekly basis. Stable disease, partial response, progression, complete response and toxic mortality rates were respectively as follows; 7.3%(6/82), 41.5% (34/82), 22% (18/82), 26.4% (24/82), 2.4% (2/82), when we examined the CRT response. Seventeen patients (21%) had treatment-related dose reduction or treatment postponement and the most common grade-3-side effect was neutropenia (9%). There was relapse or progression in 82% (59/82) of the patients during analysis; Visceral metastasis was found in thorax in 35 patients (59.3%), out of thorax in 9 patients (15.2%), both in and out of thorax in 8 patients (13.6%) and brain metastasis was found in 7 patients (11.9%).

Conclusion: Chemoradiotherapy has an acceptable toxicity profile in non-small cell inoperable lung cancer and the first relapse is often seen in thorax.

Keywords: Chemoradiotherapy, NSCLC, Stage 3

SB-30

Clinical Importance of Platelet Lymphocyte Rate in Metastatic Lung Adenocarcinoma

Serdar Arıcı, Şaban Seçmeler

Department of Medical Oncology, Okmeydanı Training and Research Hospital, Istanbul, Turkey

Introduction: Lung cancer is the most common cancer type in the world and the first malignancy among the cancer-related causes of death. Adenocarcinoma is the most common type of NSCLC and constitutes almost half of the cases. The platelet lymphocyte ratio (PLR) calculated by dividing the platelet count by the lymphocyte count (PLR) has been reported to be a prognostic factor in various solid tumors. The relationships between PLR and chemotherapy response rates in some cancers have also been reported. PLR is easy to obtain and can play an important role in predicting survival of the cancer in lung cancer. The aim of our study was to investigate the effect of PLR before treatment on overall survival (OS) in metastatic lung adenocarcinoma.

Material: Histological subtypes except adenocarcinoma and which were not at metastatic stage were excludedfrom the study. Patients were grouped as PLR <160 and ≥160.

Results: 81 patients, 60 (69,8%) male and 21(30,2%) female, were included in the study. The mean age of the patients was 62.3 (30-90). 17 patients (19.8%) had grade 3 and higher grade of ECOG PS. 65 (75.6%) patients had a history of smoking. 18 patients (20.9%) received supportive treatment in the first serie. 59 (68.6%) patients had died during the follow-up. AUC (95% CI) was found to be 0.689 (0.566-0.811) in the ROC curve formed for PLR and it was statistically significant (p=0.005). PLR was found to be higher than 160 with a sensitivity of 74,6% and a specificity of 56.0% (Figure A). mOS (95% CI) was detected as 19.0 months(6.3-31.6) in patients with PLR<160 and mOS (95% CI) was detected as 7.0 months (5.6-8.3) in patients with PLR≥160 (p=0.005) (Figure B).

Conclusion: We found that PLR≥160 in metastatic lung adenocarcinoma was a risk factor for survival in our study. We think that PLR can be used as a prognostic factor in metastatic lung adenocarcinoma and prospective studies are required for this purpose.

Keywords: Adenocarcinoma, lung cancer, lymphocyte, platelet

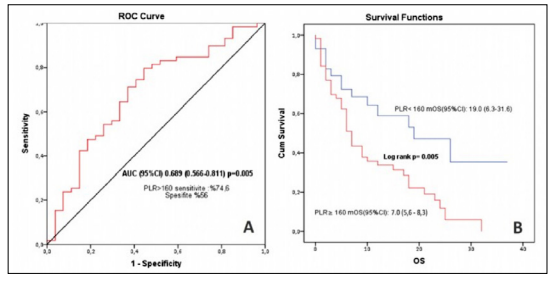


Figure 1.

SB-31

Prognostic Factors Affecting Overall Survival in Metastatic Pancreatic Cancer

Yakup Ergün, Gökhan Uçar, Yusuf Açıkgöz, Merve Dirikoç, Doğan Uncu

Department of Medical Oncology, University of Health Sciences Ankara Numune Training and Research Hospital, Ankara

Introduction: Pancreatic cancer is an important cause of cancer-related deaths. Despite the developments in the last two decades, no significant improvement was achieved in the prognosis of pancreatic cancer. In our study, we investigated retrospectively the prognostic factors affecting the overall survival (OS) in metastatic pancreatic cancer.

Material and Method: Data of 100 patients, who were diagnosed with metastatic pancreatic cancer in 2010-2017, were analyzed retrospectively. Based on previous studies, 14 variables that could have prognostic effect at the time of diagnosis were determined and the effect of these variables on OS was investigated.

Findings: The median age of the patients was 62.5 years and 70% were male. The median follow-up was 5.8 months (0.3-38.9) and the median OS was 5.7 months (95% CI 3.6-7.8). Basal patient characteristics are shown in Table 1. In univariate analysis, seven factors were found to have prognostic significance (age, jaundice, ECOG performance status, albumin level, lactate dehydrogenase (LDH) level, tumor location, and status of administration of chemotherapy). In the evaluation of these factors with multivariate analysis, older age (≥65) (HR=0.38, 95% CI 0.23-0.62, p<0.001), ECOG performance status of 2 and above (HR=0.35, 95% CI 0.21-0.60, p<0.001), high LDH level (HR=0.64, 95% CI 0.38-0.98, p=0.05) and no chemotherapy for any reason (HR=0.24, 95% CI 0.12-0.47, p<0.001) were found to be independent poor prognostic factors (Table 2). When the basal characteristics of the patients who underwent chemotherapy were compared, the ECOG performance score was lower in the chemotherapy group (66% -38% for ECOG 0-1, p=0.01).

Conclusion: In our study, we found that advanced age, high ECOG performance score, high LDH level and no chemotherapy were independent poor prognostic factors. Classification of patients according to prognostic factors may be helpful in predicting OS and in selecting a treatment regimen.

Keywords: Advanced age, chemotherapy, ECOG performance score, LDH, metastatic pancreatic cancer, prognostic factor

Table 1. Patient Characteristics

Characteristic	n (%)
Age, median (range)	62.5 (41-84)
<65/≥65	61/39
Gender	
Male/female	70/30
Weight loss	
None / Available	55/45
Jaundice	
None / Available	80/20
ECOG performance status	
0-1/2-3	58/42
Albumin (g/dl)	
Normal/Low	60/40
Lactate Dehydrogenase (IU/L)	
Normal / High	44/56
CEA (ng/ml) (median)	6.3 (0.1-3108)
Normal / High	54/46
CA 19-9 (U/ml) (median)	768 (0.8-5084)
Normal / High	74/16
Tumor location	
Head / Body / Tail	58/30/12
The number of metastatic regions	
Single / Multiple	78/22
Liver metastasis	
None / Available	34/66
Lung metastasis	
None / Available	82/18
Chemotherapy status	
Underwent/Did not Undergo	71/29

Table 2. Univariate and multivariate factor analysis for overall survival

Variable	Univariate Analysis (median GS, month)	P value	Multivariate analysis
Age			
<65/≥65	8.7/3.7	<0.001	HR = 0.38, 95% CI 0.23-0.62, p <0.001
Gender			
Male/Female	6.5/5.0	0.23	
Weight loss			
None / Available	6.5/5.6	0.6	
Jaundice			
None / Available	6.8/3.3	0.007	HR = 1.13, 95% CI 0.50-2.54, p = 0.7
ECOG performance status			
0-1/2-3	8.4/2.9	<0.001	HR = 0.35, 95% CI 0.21-0.60, p <0.001
Albumin (g/dl)			
Normal/Low	7.1/5.0	0.05	HR = 1.07, 95% CI 0.58-1.98, p = 0.8
Lactate Dehydrogenase (IU/L)			
Normal / High	10.6/3.8	0.03	HR = 0.64, 95% CI 0.38-0.98, p = 0.05
CEA (ng/ml)			
Normal / High	6.1/5.7	0.26	
CA 19-9 (U/ml)			
Normal / High	7.1/5.6	0.18	HR = 0.61, 95% CI 0.32-1.15, p = 0.1
Tumor location			
Head/ Body-Tail	7.1/3.5	0.02	HR = 0.55, 95% CI 0.30-1.02, p = 0.058
The number of metastatic regions			
Single / Multiple	5.6/7.2	0.9	
Liver metastasis			
None / Available	5.8/5.2	0.63	
Lung metastasis			
None / Available	6.1/3.1	0.45	
Chemotherapy status			
Underwent/Did not Undergo	8.1/3.1	<0.001	HR = 0.24, 95% CI 0.12-0.47, p <0.001

SB-32

Short-Term Activity and Safety Data of Enzalutamide in Metastatic Castration Resistant Prostate Cancer

İrem Bilgetekin, Umut Demirci, Ece Esin, Ayşe Ocak Duran, Gülnihal Tufan, Necati Alkış, Berna Öksüzoğlu

Department of Medical Oncology, University of Health Sciences, Dr. A.Y. Ankara Oncology Hospital, Ankara

Objective: In this study, we aimed to present the safety and efficacy data of enzalutamide before and after docetaxel in metastatic castration-resistant prostate cancer (CRPC).

Material and Method: The data of patients who were administered enzalutamide treatment due to CRPC in March 2017 -September 2018 at Dr. A.Y. Ankara Oncology Hospital, Medical Oncology Clinic were investigated by scanning electronic record system and patient folders. A total of 23 patients were included in the study. Descriptive and safety data of the patients were evaluated.

Results: Out of 23 patients with a median age of 76 (range 56-83), 7 patients (30.4%) were ECOG PS 1, 16 patients (69.6%) were ECOG PS2. Fifteen patients (65.2%) were administered enzalutamide before docetaxel and eight patients (34.8%) were administered enzalutamide after docetaxel. The median duration of use of enzalutamide was 7 months (range 1-16 months). The median duration of use of enzalutamid by patients before docetaxel was 8 months (range 1-16 months) while the median duration of use of enzalutamid by patients after docetaxel was 8 months (range 2-15 months).No adverse effect was observed in fourteen patients (60.8%) whereas 8 patients had at least one adverse effect (34.8%).The most common adverse effect was fatigue (30.4%), followed by joint pain (17.3%).The median follow-up period was 7.2 months (range 1-16.3).4 cases (17.4%) developed progression. Due to short follow-up period, median progression-free survival and overall survival could not be achieved.

Conclusion: In MCPC, enzalutamide is a tolerable and effective treatment.

Keywords: Adverse effects, enzalutamide, efficacy and safety, metastatic castration resistant prostate cancer

Table 1. Adverse Effect of Enzalutamide

	Patients administered Enzalutamide after Docetaxel	Patients administered Enzalutamide after Docetaxel	Patients administered Enzalutamide before Docetaxel	Patients administered Enzalutamide before Docetaxel
	n	%	n	%
Common adverse effect	4	17.4	4	17.4
Fatigue	3	13	4	17.4
Neuropathy	1	4.3	1	4.3
Joint pain	1	4.3	1	4.3
Weight loss	0	-	1	4.3
Amnesia	0	-	0	-
Diarrhea	0	-	0	-
Headache	0	-	0	-

SB-33

Prognostic Significance of Tumor Localization (Right Testicle / Left Testicle) in Non-Seminomatous Testicular Cancer Patients

Birol Yıldız,[1] Ece Esin,[2] Nuri Karadurmuş[1]

[1]Gulhane Training and Research Hospital, Ankara; [2]Dr. A.Y. Ankara Oncology Training and Research Hospital, Ankara

Introduction: Testicular cancer is the most common solid malignancy in men aged 15-35. Although cure can be obtained in patients with diffuse organ metastasis by effective combination chemotherapy, additional treatment may be needed in relapsed/refractory patients. Additional prognostic factors are needed because some patients cannot benefit from treatment despite prognostic scoring. Our aim was to investigate the effect of tumor localization on survival in patients with non-seminomatous testicular cancer.

Material and Method: Data from a total of 321 non-seminomatous testicular cancer cases kept in Gülhane EAH in January 1981 - December 2015 were retrieved.

Results: Demographic information and treatment modalities are outlined in Table 1. The median age was 34 (18-77). In 152 of the patients, the primary tumor was localized in the right testicle (47.2%), while in 170 cases, it originated from the left testicle (52.8%). The most common histopathological diagnosis was mixed nonseminomatous germ cell neoplasia (39.4%) and the rarest diagnosis was immature teratoma (4.7%). While 146 cases (44.3%) were diagnosed to be at the metastatic stage at the time of diagnosis, 176 patients (54.7%) had local disease at the time of diagnosis. RPLND was applied to 109 cases and live tumor was detected in 3.7% of the cases. Recurrence was observed in 74 patients (23.1%) following the treatment. The most common recurrence was retroperitoneal lymph nodes (10.3%) and lung (5%). A total of 40 cases (12.5%) were administered autologous transplant treatment. The median follow-up period was 88.3 months (1-386). Median survival rate was calculated to be 337 months for all cases. The median 10-year survival rate was found to be 74.1% and the 20-year survival rate was found to be 70.7%. There was a significant difference between the right testis and left testicular localization in terms of survival when the factors affecting the survival were examined (337.6 months etc. NR, p=0.001). The relapse rate was significantly higher in patients with right testicular tumor(84.7%-68.2%; p=0.002).

Findings: The difference in survival caused between tumor localization in the right and left testis was independent from the presence of metastases at the time of diagnosis, histopathological diagnosis, metastasis site, and stage of the disease.

Keywords: Localization, non seminomatous, testicular cancer

SB-34

Prospective Evaluation of Ototoxicity in Patients with Germ Cell Tumors Undergoing Autologous Hematopoietic Stem Cell Transplantation

İsmail Ertürk,[1] Murat Bınar[2]

[1]Department of Oncology, University of Health Sciences, Gulhane Medical Faculty, Ankara; [2]Department of Otorhinolaryngology, University of Health Sciences, Gulhane Training and Research Hospital, Ankara

Purpose: Ototoxicity is a serious problem in patients receiving platinum-based therapy. The treatment of platinum-based therapies in germ cell tumors (GCT) is the basis of the treatment. In this study, we aimed to use a higher dose of carboplatin with autologous hematopoietic stem cell transplantation (AHSCT) in relapse refractory cases and to evaluate its effects on the ears.

Method: The audiometric examination of the patients who had to go through the AHSCT due to relapse and refractory GCT was performed at 20 days intervals before and after AHSCT. The results of the audiometry were compared before and after the transplantation and the degree of ototoxicity was determined according to the Brock classification. High dose chemotherapy dose was given in 1st, 2nd, and 3rd days as Carboplatin 700 mg/m^2 and 1st, 2nd, and 3rd days as etoposide 750 mg/m^2.

Findings: A total of 12 patients were included in the study and the mean age was 34.9 (20-47). The patients received an average of 2.5 (2-4) cycles of treatment prior to transplantation. The degree of hearing loss at higher frequencies (at 4000 Hz and greater) was higher for the right and left ears than before the transplantation individually and this difference was statistically significant (respectively; 59,16 (20-85); 37,08 (15-60); 55.41 (30-75); 34.16 (10-50); p<0.05). The degree of ototoxicity was found to be grade 3 (25%) in 3 patients, grade 2 (50%) in 2 patients, grade 1 (8.3%) in 1 patient, and grade 0 (16.66%) in 2 patients.

Results: Carotoplatin is an ototoxic treatment as high-dose chemotherapy. Treatment methods for prevention of the ototoxicity can be developed.

Keywords: Autologous bone marrow transplantation, carboplatin, ototoxicity

SB-35

Incidental FDG Involvement in Gastrointestinal Tract in PET/CT

Ersin Özaslan,[1] Melih Kızıltepe,[1] Ümmühan Abdulrezzak,[2] Mustafa Kula,[2] Oktay Bozkurt,[3] Ayşe Ocak Duran,[3] Mahmut Uçar,[3] Teoman Jokes,[3] Ender Doğan,[2] Ulaş Sekan Topaloğlu,[1] Mevlüde İnanç,[3] Metin Özkan[3]

[1]Department of Medical Oncology, Kayseri Training and Research Hospital, Kayseri; [2]Department of Nuclear Medicine, Erciyes Medical Faculty, Kayseri; [3]Department of Medical Oncology, Erciyes Medical Faculty, Kayseri

Purpose: Increased use of 18F-FDG PET/CT in cancer patients led to an increase in FDG involvement in the gastrointestinal tract (GIT). The aim of this study was to evaluate the benign malignancy discrimination of 18F-FDG PET/CT on FDG involvement amounts in incidental 18F-FDG PET/CT.

Material and Method: 2850 patients who underwent FDG-PET/CT at Erciyes Medical Faculty between the dates of January 2010 and September 2016 were evaluated retrospectively. The cases who had incidental GIT involvement and underwent biopsy via gastroscopy and colonoscopy from the areas of involvement and got diagnosed were included to the study. Two nuclear medicine experts evaluated the FDG PET/CT's. Spearman correlation test and Mann-Whitney test were used for statistical comparison of benign and malignant groups.

Findings: 73 of them underwent endoscopic procedures out of the 571 patients with incidental FDG involvement in the GIT. Among these 73 patients; 7 (9.6%) malignancy, 2 (2.3%) high grade dysplasia, 18 (24.7%) adenoma, and 24 (32.9%) inflammation were found to be pathological. Upper endoscopy or colonoscopy was normal in 22 (30.1%) patients. The number of cases with focal involvement in FDG PET/CT was 66 (90.4%) and the number of cases with diffuse involvement was only 7 (9.6%). Malignancy was not detected in any of the patients with diffuse involvement.

The mean SUVmax value was 20.5±18.2 (7.4-56.5) in the 7 patients with incidental malignancy and the mean SUVmax value was 9.0±4.1 (2.4-19.9) in patients with incidental benign lesion (p=0.023, rho=0.266). So, there is a weak but significant correlation between the SUVmax and malignancy.

Conclusion: Although this study showed that the likelihood of malignancy increased with increasing FDG involvement at GIT in PET/CT, the SUVmax values of malignant cases were found to be broader so, endoscopy can be a more accurate approach in all patients with FDG involvement.

Keywords: FDG-PET/CT, gastrointestinal tract, SUVmax, colon cancer, gastric cancer

SB-36

Significant Prognostic Factor in Biliary Tract Cancer: Systemic Immune Inflammatory Index

Sümeyra Derin, Mevlüde İnanç, Oktay Bozkurt, Teoman Şakalar, Ender Doğan, Metin Özkan

Erciyes University, The Department of Medical Oncology, Kayseri

Introduction: Biliary tract cancers (BTC) are cancers stemming from intrahepatic biliary tract, extrahepatic biliary tract, gallbladder and ampulla vateri. Its

course is aggressive although BTC is less common than other cancers. Many patients are diagnosed in advanced or metastatic period since early diagnosis is difficult. There is no good prognostic factor in the previous studies for BTC To the best of our knowledge. In this study, the effects of age, number of metastatic sites, hemoglobin level, neutrophil-lymphocyte ratio (NLR), platelet-lymphocyte ratio (PLR), systemic immune inflammatory index (SII) on overall survival (OS) and progression-free survival (PFS) were evaluated in advanced stage and metastatic disease after the first line of chemotherapy (CT).

Material and Method: 76 patients with the diagnosis of BTC between 2004-2017 were included in the study. The patient files were retrospectively reviewed. Hemoglobin, neutrophil, lymphocyte, and platelet values, PFS and OS periods after first line of CT were recorded. NLR, PLR and SII (neutrophil x platelet/ lymphocyte) were calculated. The SII median value of 797x10^9/L was determined as the cut-off value.

Findings: The median OS was found as 11 months (95% confidence interval (CI) 4.6-17.3) in patients with hemoglobin value <12 g/dl and 17 months in patients with hemoglobin value ≥12 g/dl (95% CI 12.2-21.7) (p=0.035). The median OS was found as 20 months (95% CI 10.7-29.2) in patients with SII ≤797x10^9/L and it was found as 11 months (95% CI 6.4-15.5) in patients with SII >797x10^9/L (p=0.05). SII was not an independent prognostic factor for PFS after first-line CT in Cox multivariate analyzes, but SII was shown to be an independent prognostic factor for OS (hazard ratio:0.49 (95% CI 0.25-0.95) (p=0.035).

Conclusion: In our study, prognostic factors in advanced stage and metastatic BTC were investigated. The level of hemoglobin and SII was found to be an useful prognostic factor in these patients. As a result there is a good correlation between low SII and high OS.

Keywords: Biliary tract cancers, prognostic factor, systemic immune inflammatory index

Table 1. Patient Information and Characteristics

The median age	62 (30-87)
Female	38 (50%) patients
Male	38 (50%) patients
GALL BLADDER CANCER	16 patients
Cholangiocarcinoma	60 patients
Single site metastasis	50 (66%) patients
Multiple region metastasis	20 (26%) patients
Non-Metastasis	6 (8%) patients
Hemoglobin 12 g/dl and above	51 (67%) patients
Hemoglobin 12 g/dl and below	25 (33%) patients
Progression after first cycle of CT	53 (70%) patients
PFS after the first cycle of CT	8 (1-77) months
OS	13.5 (1-82) months

SB-37

The Importance of Inflammatory Markers in Predicting the Response to Neoadjuvant Chemotherapy in Breast Cancer

Mahmut Büyükşimşek,[1] Hilmi Erdem Sümbül,[2] Semra Paydaş[1]

[1]Çukurova University Faculty of Medicine, Department of Medical Oncology, Adana,Turkey; [2]University of Health Sciences, Adana City Training and Research Hospital, Clinic of Internal Medicine, Adana, Turkey

Introduction: Monocyte/HDL ratio (MHR), neutrophil/lymphocyte ratio (NLR), derive neutrophil/lymphocyte ratio (DNLR) have been shown to be new markers of inflammation and oxidative stress and some inflammatory diseases have been closely associated with the presence and prognosis of cancers. There are studies on NLR and PLR in breast cancer, but no studies have been conducted on MHR and DNLR. In our study, we aimed to determine the relationship between prognosis factors, chemotherapy protocols and response to treatment, and MHR and DNLR in breast cancer patients.

Material and Method: 110 breast cancer patients were included in this retrospectively conducted study. Demographic characteristics, stages, chemotherapy protocols, response status, hormonal staining characteristics in pathology, and laboratory data of the patients were evaluated.

Results: The patients were divided into 3 groups according to chemotherapy protocols. There were 60 patients (54.5%) who received anthracycline + taxane, 23 patients who received anthracycline + taxane + transtuzumab (20.9%), and 27 patients (24.5%) who received taxane + platinum + transtuzumab. There was no grade 1 patients. 60 patients were Grade 2 (54.5%) and 50 patients were Grade 3 (45.5%). MHR and DNLR were respectively as 13.2984±10.12621 and 1.8974±0.85670 in the group responding to chemotherapy and it was 17.4279±17.46750 and 1.5599±0.516940 in the non-responding group. There was a significant difference of MHR between the groups who responded and did not respond to chemotherapy (p<0.001). Logistic regression analysis was performed with parameters significant between the groups with univariate analysis in breast cancer patients. As a result of this analysis, only MHR (p<0.001) was found to determine the response to chemotherapy independently.

Discussion: MHR can be used to predict the response to neoadjuvant performed chemotherapy in breast cancer. There is a need for prospective studies with prognosis of disease and clinical follow-ups with more patients involved.

Keywords: Breast cancer, CT response, monocyte/HDL ratio, neoadjuan treatment

SB-38

The Correlation of PTEN, P53 and LKB1 Mutation Profile with Clinicopathological Parameters in Patients with Locally Advanced and Metastatic Non-Small Cell Lung Carcinoma

Paşa Aksoy,[1] Gamze Gököz Doğu,[2] Umut Çakıroğlu,[2] Nail Özhan,[2] Ege Karagür,[3] Aydın Demiray,[3] Hakan Akça,[3] Arzu Yaren,[2] Ahmet Ergin[4]

[1]Republic of Turkey Ministry of Health Sarıkamıs State Hospital, Kars; [2]Department of Internal Medicine, Department of Medical Oncology, Pamukkale University, Denizli; [3]Department of Medical Biology, Pamukkale University, Denizli; [4]Department of Public Health, Pamukkale University, Denizli

Material and Method: 74 patients who were diagnosed with non-small cell lung cancer (NSCLC) and who were admitted to Pamukkale University Faculty of Medicine, Medical Oncology Department in the years of 2012-2015 were included in our study. The effects of TP53, PTEN and LKB-1 gene mutations' incidence and effects on overall survival and progression-free survival in patients were investigated.

Findings: A total of 74 newly diagnosed NSCLC patients were included in our study, of which 69 (93.2%) of them were female and 5 (6.8%) of them were male. The median age of the patients was 65 and the age range was 38-81. ECOG performance score was 0 in 14 (18.9%) patients, 1 in 30 (40.5%) patients, 2 in 18 (24.3%) patients and, 4 in 1 (1.4%) patients. Thirty-eight patients (51.4%) were reported to have squamous cell, 26 (35.1%) patients were reported to have adenocarcinoma, 7 (9.5%) patients were reported to have NOS, and 3 (4.1%) patients were reported to have large cell lung cancer. The progression-free survival (PFS) was 17.34±2.61 months on average and the overall survival (OS) on average was 18.96±2.36 months during the median 4-month follow-up period (range, 1-35 months). Only the presence of p53 mutation was found to be statistically effective on PFS and OS in PFS and OS analyses; in order p=0.002, p=0.002. No effect of other mutations was detected. A tendency to be significant between the P53 mutation and PFS (OR: 2.910.95% CI=0.852-9.934, p=0.088) was determined and there was no significant relation found between PTEN and PFS in multiple regression analysis. There was no correlation with the presence of mutation in multiple regression analysis regarding the OS.

Discussion: TP53 gene mutation was found to be negatively effective on PFS and OS, and the presence of PTEN mutation was found to be ineffective. We think that large-scale studies are needed in which the gene mutation analysis from peripheral blood is evaluated with more number of patients because it is more practical.

Keywords: Non-small cell lung carcinoma, overall survival, tumor suppressor genes

SB-39

The use of Nimotuzumab in Progressive High-Grade Glioma: Single Center Experience

Umut Çakıroğlu, Nail Özhan, Serkan Değirmencioğlu, Atike Gökçen Demiray, Gamze Gököz Doğu, Arzu Yaren

Department of Internal Medicine, Department of Medical Oncology, Pamukkale University Faculty of Medicine, Denizli

Purpose: The purpose of this study was the evaluation of patients who underwent nimotuzumab treatment in any stage of the treatment for high relapse rate glial tumor at the Pamukkale University's Medical Oncology clinic. Nimotuzumab is a humanized monoclonal antibody created against the epidermal growth factor receptor used in high grade glial tumors.

Findings: 6 patients (4 females, 2 males) underwent nimotuzumab treatment in our clinic and the median age was 37 years (range 24-51 years). Two patients had glioblastoma, two patients had anaplastic oligodendroglioma, one patient had astrocytoma, and one patient had oligodendroglioma. All patients had temozolamide and irinotecan+bevacizumab treatment earlier on. It was applied to 3 patients in the forth line, 2 patients in the third line, and one patient in the fifth line as systemic chemotherapy. Nimotuzumab administration was started with 6 weeks as 200 mg induction therapy and then 200 mg every 2 weeks. The patients were followed up with cranial+diffusion MR every 2 months during the treatment. Six patients received nimotuzumab a median of 12.5 times (range, 2-33), 92 times total. The patient was in the intensive care unit when nimotuzumab was administered to the patient with relapse astrocytoma. The patient died before completing the induction treatment after two applications. MRI evaluations of the second month showed no progression in any of the patients. The median 6 months (range 4-14) PFS was obtained for patients with nimotuzumab treatment except for the patient who could not complete the induction therapy. The patient with relapse anaplastic oligodendroglioma have continued the treatment for 14 months without progression. Hair loss in two patients, skin rash in two patients, and dry skin in one patient was observed as side effects. Patients who progressed were performed carboplatin + cyclophosphamide, temozolamide rechallenge or gamma-knife. Total of 4 patients died and two patients are alive.

Discussion: It is seen as an easily tolerable agent in the clinic. More extensive clinical trials are needed in combination therapy and in patients with EGFR overexpression.

Keywords: EGFR, high grade glial tumors, nimotuzumab, progression-free survival

SB-40

Comparison of ICE and CE High-dose Chemotherapy Regimens in Patients Undergoing Autologous Stem Cell Transplantation for Diagnosis of Testicular Cancer

Birol Yıldız,[1] Ece Esin,[2] İsmail Ertürk,[1] Nuri Karadurmuş[1]

[1]Department of Medical Oncology, Gulhane Training and Research Hospital, Ankara; [2]Department of Medical Oncology, Dr. A.Y Ankara Oncology Training and Research Hospital, Ankara

Introduction: Testicular cancer is the most common solid malignancy among all cancer types in men between the ages of 15 and 35 years. Even though there may be widespread organ metastasis with platinum-based combination chemotherapy, cure may be obtained in patients, but additional treatment may be required in patients with refractory/relapse. Cure can be achieved in relapse/refractory patients with high-dose chemotherapy but there is no ideal HDC agent. The aim of this study was to compare the efficacy of chemotherapy regimens in patients treated with HDC and ASCT with the diagnosis of relapse/refractory testicular cancer.

Material and Method: The data of 50 cases with refractory testicular cancer diagnosis who underwent HDC and ASCT at Gulhane TRH were evaluated between January 2011 and July 2018.

Findings: Stage III disease was present at the time of diagnosis in 90% of the cases with a median age of 34. The rescue therapy was applied as CE in 50% and ICE in 50% of the cases. 3 of the CE treated cases had complete response in one of the patients treated with ICE while a similar partial response was achieved in both treatment types. A statistical significance was not obtained although there was a trend in favor of ICE among the ICE and CE groups in terms of progression-free survival (p=0.06). The median survival in the general population was calculated as 223.4 months (76.1-370.7). Although there was a difference in OS in chemotherapy groups, this difference was not found to be significant (p=0.06). The mean duration of engraftment of patients treated with CE was calculated as 11.2±2.3, while the mean duration of engraftment of patients receiving ICE was found to be 15.5±2.1 (p<0.001).

Conclusion: Engraftment was obtained in significantly shorter time in patients who underwent CE protocol. Survival in the CE ICD regimen was found to be better than the ICE regimen, but there was no statistically significant difference between the groups in terms of side effects.

Keywords: Autologous Stem Cell Transplantation, relapse/refractory, testicular cancer

SSB-01

The Effect of Creatinine Clearance on Survival Parameters in Cisplatin Based Chemotherapy Patients with Extensive Stage Small Cell Lung Cancer

Ali Murat Sedef,[1] Ali Ayberk Besen[2]

[1]Department of Oncology, Adana City Hospital Medical, Adana; [2]Department of Oncology, Adana Başkent University Hospital Medical Faculty Medical, Adana

Purpose: Small Cell Lung Cancer constitutes 15% of the lung cancers. Cisplatin is the foundation of the treatment for the last 40 years and it is known not to give survival advantage to cytotoxic, goal oriented and immunotherapeutic agents. The hypothesis of glomerular filtration rate being effective on survival parameters are designed with this study.

Method: Between 2011 and 2016, 80 out of 120 patients with SCLC were in extensive stage, and 53 of these patients had received at least 4 cures of full-dose cisplatin and were included in the study.

Findings: The median age was 58. The average values of creatinine, BSA, CClr (MDRD and Cockcroft Gault formula), CRP, and albumin were as in order; 0.738 mg/dL, 1.8 kg/m^2, 116.6 (70-179) mL/min and 118.2 mL/min, 47.5 mg/dL and 3.9 gr/dL. For each cycle the cisplatin dose and cycle count was in order as 121mg/3 hf (80-150) and 5.4 (4-6). 41 (77.4%) patients died after an average follow-up of 13 (4-44) months. Illness control rate was 98.7%. The median of survival was (OS) was 14 months (12.1-15.9). There was positive correlation between the cisplatin dose and BSA (r=0.281, n=53, p=0.041). There was no statistically significant relation between Cisplatin dose and CClr (With MDRD r=-0.118, n=53, p=0.401 and with Cockcroft-Gault formula r=-0.216, n=53, p=0.121). In the statistical analysis, the CClr (>120 mL/min. <120 mL/min) is shown not to significantly effect the OS (With MDRD p=0.364 and with Cockcroft-Gault formula p=0.325).

Results: Our findings showed that CClr has no significant relation to extensive stage SCLC patients for overall survival. For this reason, the patients between CClr 61-140 mL/min. benefit the same from the cisplatin dose given from the body surface areas (BSA).

Keywords: Cisplatin, overall survival, pharmacokinetics, small cell lung cancer

SSB-02

The Effects of Preoperative and Postoperative Serum Albumin Values on the Prognosis of Patients Operated Due to Early Stage Non-Small Cell Lung Cancer

Özlem Yersal

Department of Internal Diseases, Adnan Menderes University, Medical Oncology Field, Aydın

Introduction: The serum albumin levels nutritional state is an important parameter in the evaluation process. We aimed to analyze the relation between the overall survival and serum albumin levels in patients operated due to lung cancer other than early stage small cell cancer.

Method: This study included 104 patients who had adjuvant therapy or were followed-up with the diagnosis of NSCLC in Adnan Menderes University Medical Faculty Medical Oncology Department between 2015-2018. Initial stage, received treatments, pathological features, preoperative and postoperative serum albumin values were obtained from patient files. The overall survival time was calculated by Kaplan-Meier method and the factors related to overall survival were evaluated by Cox Regression Analysis.

Findings: A total of 104 patients were included in the study. The median age was found as 65.5 (36-85). 64 of the tumors were located in the right, 35 in the left, and 51% in the upper lobe. The most commonly seen lower type was squamous cell carcinoma (%50). Median tumor diameter was 2.8 cm (0.6-39), the number of lymph node was 21, and the number of metastatic lymph node was found as 1 (0-13). Lymphovascular invasion was present in 71 (%68.3) patients. The most common stage was stage 2. In the follow-up 35 (%33.7) of the patients died. The mean of overall survival was 41.6 months. The preoperation median albumin value was found as 4.1 mg/dl. The overall survival in patients who had <4.1mg/dl albumin was 39.8 and the mean of survival in patients who were over that was 41.6 months (p=0.846). The post-operation albumin value was found as 3.2 mg/dl. The overall survival was found as 37.5 months in patients with preop. albumin of <3.2 mg/dl and 45.3 months in patients over that (p=0.231).

Conclusion: The difference was not statistically significant although overall survival was shorter in patients with early stage lung cancer who especially had low serum albumin levels post-operation.

Keywords: Albumin, lung cancer, prognosis

SSB-03

The prognostic importance of Neutrophile Lymphocyte Ratio (NLR) and Derive Neutrophile Lymphocyte Ratio (DNLR) in Cases with Hodgkin Lymphoma

Cem Mirili, Semra Paydaş

Department of Medical Oncology, Cukurova University Medical Faculty, Adana

Purpose: Hodgkin lymphoma (HL) consists almost 10% of all lymphomas. The hl diagnosis is made by observing giant malignant multinuclear reed stenberg (RS) cells inside the micro-environmental formed by the reactive inflammatory cells. Our basic objective in this study is to provide the prognostic importance of nlr and DNLR from the systemic inflammation indicators in HL cases.

Method: We have included 62 patients in our study who had been diagnosed with HL and have been followed and treated by us between may 1997 and January 2015. Demographic and laboratory (leucocyte, neutrophile, lymphocyte) data of the patients have been obtained from hospital records. The most sensitive and specific values for NLR (4,4) and DNLR (2,6) were determined via ROC curve and their significance in regards to PFS and os were decided.

Findings: 32 of our cases were female and 30 of them were males. 35 (%56,5) of them according to histological sub-types have nodular sclerosant, 25 (%40,3) of them have mixed cellular and one patient is lymphocyte rich and one patient is lymphocyte poor. According to ann arbor staging system, the cases were found to be on 1 (1.6%), 27 (43.5%), 24 (38.7%), 10 (16.1%) u stage 1,2,3,4 and 33 (%53.2) of them in the time of the period of the analysis had relapse and 45 (%72.6) of them were still alive. Average PFS of the patients was 102.9 months and the os was 147.9 months. The group with NLR <4.4 has a longer PFS (142.6 VS 36 MONTHS, p=0.000) and os (179,5 VS 86 MONTHS, p=0.000) compared to the group with ≥4,4. The group with DNLR <2.6 has a longer PFS (139.7 vs 43.3 month, p=0.000) and os (173.7 VS 91.8, p=0.003) compared to the group with ≥2.6.

Conclusions: The systemic inflammation markers are important for both the os and PFS in terms of prognostic importance in the diagnosis of the hodgkin lympfoma cases.

Keywords: Hodgkin lymphoma, neutrophile lymphocyte ratio, derive neutrophile lymphocyte ratio.

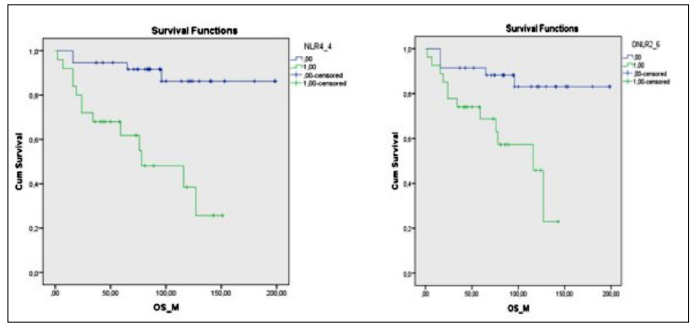


Figure 1.

SSB-04

Factors Predicting Survival in Patients with Malignant Biliary Obstruction and Percutaneous Biliary Drainage (Single Center Experience)

Hayriye Şahinli,[1] Hacer Demir,[2] Ahmet Özet[3]

[1]Department of Medical Oncology, Diskapi Yildirim Beyazit Traning and Research Hospital, Ankara; [2]Department of Medical Oncology, Afyon Kocatepe University, Afyon; [3]Department of Medical Oncology, Gazi University, Ankara

Purpose: Short-term survival in patients with biliary obstruction who underwent primary transhepatic biliary drainage (PTBD) has been reported. The aim of this study is to determine the factors predicting survival of patients with malignant biliary tract obstruction.

Material and Method: Between January 2009-November 2014, 90 patients who were diagnosed with histopathological malignity, biliary obstruction, and had primary biliary drainage in Gazi University, Faculty of Medicine were included in our study.

Findings: 90 patients were evaluated according to the study criteria. 51 (57) of the patients were male and the mean age was 64 (29-81). The median of survival was 44 (1-154) days. 43.3% of the patients had pancreatic malignancy, 20% had stomach cancer, 6.7% had cholangiocellular carcinoma, 10% had colorectal cancer, 5.6% had gallbladder carcinoma, 3.3% had ovarian cancer, 5.6% had lung cancer, 1.1% had hepatocellular carcinoma, 2.2% had renal carcinoma, 1.1% had breast and 1.1% had unknown primary malignancies. Success had been achieved in 21 patients (23.3%) after primary transhepatic biliary drainage. 22 (24.2%) patients received chemotherapy after the procedure. The survival of patients who received chemotherapy after PTBD was significantly longer (p<0.00). In 11.6% of patients with whom we had no success had multiple liver metastases. The survival of the patients with liver metastases were significantly lower.

Conclusion: The presence of multiple liver metastases after the development of malign biliary obstruction were found to be poor prognostic factors in patients who underwent primary biliary drainage. The survival of patients who received chemotherapy after successful treatment was significantly longer. Age, undergoing chemotherapy before PTBD, and the type of the tumor were not found to have effects on survival. As a result, patient selection should be made carefully in view of the poor prognostic factors in patients who are considered to have palliative PTBD. Patients who will not have a survival advantage after PTBD will be determined well and thus unnecessary invasive procedures will be avoided.

Keywords: Malignant biliary obstruction, Percutaneous transhepatic biliary drainage, multiple liver metastases

SSB-05

The Prognostic Significance of Gamma-Glutamyl Transferase in Patients with Advanced Stage Non-Small Cell Lung Cancer

Yakup Bozkaya

Department of Oncology, Edirne Sultan I. Murat State Hospital, Edirne

Introduction and Purpose: In this study, we aimed to evaluate the relationship between serum GGT level and overall survival at the time of diagnosis in patients with advanced non-small cell lung cancer (NSCLC).

Patients and Method: The files of patients with metastatic NSCLC who were admitted to the Medical Oncology Clinic of our hospital between April 2013 and December 2017 were retrospectively reviewed. The patients were divided into two groups as normal and high GGT according to normal reference intervals. The patients were evaluated according to the clinicopathological features with the received treatments.

Findings: A total of 115 patients with NSCLC were included. The median of age was 67 years (december=47-81) and the majority of the patients were (93%) male. The most common histopatholytic subtypes were adenocarcinoma (51%) and history of smoking (89%). There were some differences in histopathological and clinical parameters between groups with normal and high GGT levels. Especially in the High GGT group, Female gender (15% vs 3%, p=0.01), ECOG performance score 2-4 (67% vs 37%, p=0.002), Weight loss (67% vs 34%, p=0.001), High Lactate Dehydrogenase level (51% vs 30%, p=0.02) was found to be significantly higher than the normal GGT group. ECOG performance status was 2-4 (p<0.001), weight loss at the time of diagnosis was (p<0.001), high LDH (p<0.001), hemoglobin ≤11 (p=0.04), metastatic site count ≥2 (p<0.001) and the high GGT group (p<0.001) were effective factors on overall survival in the univariate analysis. In multivariate analysis, ECOG performance status 2-4, weight loss at the time of diagnosis, the number of metastatic sites ≥2 and the high GGT group was related to shorter overall survival.

Conclusion: Pre-treatment high serum GGT levels in patients with advanced NSCLC are prognostic factors for overall survival. Thus, in this patient group, low-cost GGT, which can be measured in routine clinical practice, can be used as a prognostic tool.

Keywords: Gamma glutamine transferase, non-small cell lung cancer, prognosis

SSB-06

The Effect of Tumor Localization (Right Testis / Left Testis) on Prognosis and Survival in Patients with Seminoma Diagnosis

Birol Yıldız,[1] Ece Esin,[2] İsmail Ertürk,[1] Ramazan Acar,[1] Ramazan Esen,[1] Nuri Karadurmuş[1]

[1]Department of Hospital Medical Oncology, Gulhane Training and Research, Ankara; [2]Dr. A.Y. Ankara Oncology Training and Research Hospital, Ankara

Introduction: Germ cell tumors which constitute 95% of testicular cancer are grouped as pure seminoma and nonseminomatous germ cell tumors. Seminomas constitute the 60% of germ cell tumors. Patients with seminoma have high susceptibility towards both chemotherapy and radiotherapy treatments. There are patients with refractory/relapse despite successful combined therapies, even if there is widespread organ metastasis, although cure can be obtained in patients. In this study, we aimed to investigate the effect of tumor localization on survival in patients with seminoma diagnosis.

Material and Method: Data of a total of 45 seminoma cases were obtained in Gülhane TRH between January 1981 and December 2015.

Findings: Demographic information and treatment methods are summarized in the Table 1. The median of age was 35 (21-57). The primary tumor was localized in the right testis for 26 patients (57.8%), and in 19 cases it derived from the left testis (42.2%). Nineteen cases (42.2%) were at the metastatic stage at the time of the diagnosis and 26 patients (57.8%) had local disease at the time of diagnosis. The most common metastasis site was isolated lung (31.1%). RPLND was performed in 11 cases and no live tumors were detected in any of these cases. Relapse occurred in 27 of the patients (60%) in the post-therapy follow-up. The most common relapse region was retroperitoneal lymph nodes (31.1%) and the lungs (11.1%). A total of 10 cases (22.2%) received autologous transplant treatment. The median follow-up period was 84.5 months (1-386). The median survival was not found during the follow-up period. Predicted median 10-year survival rate was found as 75% while the 20-year survival rate was found as 66.7%. The survival of the patients with a tumor deriving from the left testis was found to be significantly longer compared to the cases originating from the right testis (205.1 months vs. NR, p=0.002).

Conclusion: The survival of the patients with a tumor deriving from the left testis was found to be significantly longer than the patients who had a right testicular origin.

Keywords: Seminoma, germ cell tumor, localization

SSB-07

Oral Microbiome Analysis with 16S rDNA Sequencing in Colorectal Cancer

Deniz Can Güven,[1] Koray Ergünay,[2] Annika Brinkmann,[3] Alpaslan Alp,[2] Fatma Nur Kıttana,[2] Yakut Akyön,[2] Engin Yılmaz,[4] Derya Karakoç,[5] Erhan Hamaloğlu,[5] Şuayip Yalçın,[1] Andreas Nitsche,[3] Mutlu Hayran,[6] Ömer Dizdar[6]

[1]Department of Medical Oncology, Hacettepe University Institute of Cancer, Ankara, Turkey; [2]Department of Medical Microbiology, Hacettepe University Medical Faculty, Ankara, Turkey; [3]Robert Koch Institute, Centre for Biological Threats and Special Pathogens 1 (ZBS 1), Berlin, Germany; [4]Department of Medical Microbiology, Acıbadem Mehmet Ali Aydınlar University Faculty of Medicine, Istanbul, Turkey; [5]Department of General Surgery, Hacettepe University Faculty of Medicine, Ankara, Turkey; [6]Department of Preventive Oncology, Hacettepe University Institute of Cancer, Ankara, Turkey

Introduction: The oral cavity in humans contains a microbiota with more than 700 bacterial species. Data on colorectal cancer (CRC) are limited although the characteristics of oral microbiota have been investigated on many cancer types. Based on this, we aimed to investigate possible variance in oral bacterial populations in CRC compared with healthy individuals in our study.

Method: 32 patients (Group 1) who were diagnosed with CRC but not yet received a treatment and 32 healthy volunteers in the same age group (Group 2, control group) were included in the study. Saliva samples were collected from the patients and control group by standard methods. Bacterial populations were identified by approaches as polymerase chain reaction multiplication of partial 16S rDNA sequences and comparison with databases by various softwares after new generation sequencing (Illumina MiSeq).

Findings: Bacteroidetes, Firmicutes Proteobacteria, Actinobacteria and Spirochaetes were not significantly different between groups when the bacterial reading counts were compared between groups. In family-level examinations, there were statistically significant differences between two groups in terms of Pasteurellaceae and Neisseriaceae (p=0.008 and p=0.036, respectively). In the patient group, the number of bacteria in the Pasteurellaceae family was lower than in the control group (p=0.008) and the number of bacteria in the Neisseriaceae family was higher than the contol group (p=0.036). In comparison with the disease stage in the patient group of CRC; Bacillales members readings were seen to have negative correlation with the stage (r=-0.638, p<0.001) and the number of readings of Proteobacteria members showed a positive correlation with the stage (r=0.450, p=0.01) (Figure 1).

Conclusion: In our study, there were significant differences in the amount of Pasteurellaceae and Neisseriaceae members in healthy volunteers with CRC patients. This finding may be helpful in CRC screening and identifying risk groups. In addition to this, it was thought that the determination of the bacteria with different amounts in respect to the stages may have prognostic value. The follow-up of the patients is continued in order to determine the relationship of the findings with the treatment response and prognosis.

Keywords: Colorectal cancer, oral microbiome, next generation sequencing

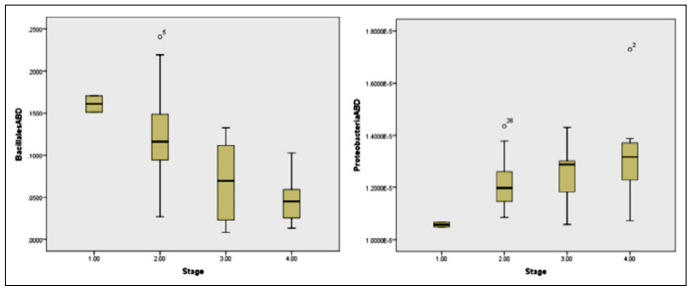


Figure 1. The correlation analyses according to stages in patient group.

SSB-08

Prognostic Value of Inflammatory Index in the Survival of Metastatic Pleural Mesothelioma Patients Treated with Primary Care Platinum-Based Chemotherapy

Teoman Şakalar, Ender Doğan, Sümeyra Derin, Mevlüde İnanç, Metin Özkan, Oktay Bozkurt

Department of Medical Oncology, Erciyes University Faculty of Medicine, Kayseri

Introduction and Purpose: In our study, the prognostic value of pre-treatment inflammatory indices including neutrophil-lymphocyte ratio (NLR), platelet-lymphocyte ratio (PLR), and systemic immunodeficiency index (SII) was investigated in metastatic pleural gouteomyoma patients treated with first-line platinum-based chemotherapy.

Method: 64 metastatic pleural mesothelioma patients treated with primary care platinum-based chemotherapy between January 2008-February 2018 were retrospectively analyzed. Values were obtained from laboratory tests which were performed within 10 days before first-line chemotherapy. NLR, PLR and SII were evaluated to determine the potential correlation with PFS and OS in metastatic pleural mesothelioma patients treated with first-line platinum-based chemotherapy. OS and PFS were calculated using Kaplan-Meier method.

Findings: 28 were female (43%) and 36 were male (57%) out of the 64 patients included in the study.The median of age was 58. (Ages 24-81)The performance score of all patients was 0-1. 47 (73%).47(%73) of the patients had epithelioid, 6 (9%) of them had sarcomatoid, 7 (10%) had biphasic, and 4 (6%) had desmoplastic type. NLR, PLR, and SII were each divided into two groups and respectively were as <3.5 and ≥3.5, <171 and ≥171, <940 and ≥940. The low neutrophil-lymphocyte ratio, platelet-lymphocyte ratio and the group with low inflammatory index were found to be longer in terms of disease-free survival and overall survival, but this difference was not statistically significant. Disease-free survival with respect to NLR, PLR and SII were determined as PFS; 9vs6; 8vs6; 9vs6 months respectively, p values were determined as; p<0.297, p<0.345,p <0.333 respectively, and Overall survival was determined as (OS; 16vs13; 17vs15; 16vs12 months, p values were found as p<0.757, p<0.715, p<0.610 respectively...

Conclusion: In this study, patients with increased NLR, PLR and SII pretreatment showed worse PFS and OS than patients with metastatic pleural mesothelioma treated with first-line platinum-based chemotherapy without increased inflammatory indices, but this difference was not statistically significant. The reason for that may be the limited number of studies and the retrospective nature of the study.

Keywords: Systemic immune-inflammation index, neutrophil-lymphocyte ratio, platelet-lymphocyte ratio, pleural mesothelioma

SSB-09

Ipilumumub Treatment in Patients with Metastatic Malignant Melanoma: A Single Center Experience

Heves Sürmeli, Selver Işık, Mustafa Başak, Deniz Özyükseler Tataroğlu, Abdülkerim Oyman, Deniz Işık

Department of Medical Oncology, Dr. Lütfi Kırdar Kartal Training and Research Hospital, Istanbul

Introduction: Ipilimumab, an anti-cytotoxic T-lymphocyte-associated protein 4 (CTLA-4) antibody, was the first agent to show survival benefit in the treatment of metastatic cutaneous melanoma as a secondary care and then primary care therapy. Our aim is to analyze the progression-free survival (PFS) and overall survival (OS) data of our patients whom we followed and treated in our unit.

Method: The data of 15 patients with metastatic malignant melanoma who progressed under primary care and secondary care and underwent ipilimumab were followed-up retrospectively at Lutfi Kirdar Kartal Training and Research Hospital Medical Oncology Unit between 2011-2018. Patient and tumor characteristics, PFS and OS durations were analyzed by relevant statistical methods.

Findings: The mean age of the patients at the time of the diagnosis was found as 63 years. There were 10 male patients (67%) and 5 female (33%) patients. 1 of the cases was diagnosed with axillary, 1 of them was nasal cavity and 1 was originating from etmoid sinus. 9 of them were diagnosed with skin lesions, 1 out of the 2 cases was diagnosed with metastatic nodule and the other was diagnosed with axillary lymph node metastasis. 2 of the patients were BRAF positive. The previous treatment of 14 patients was temozolamide (tmz) and 1 of them received Dabrafenib and Trametinib after the tmz. Progression-free survival was 4.9 months (95% confidence interval: 4.0-5.7) in the whole group. Overall survival was found as 13.4 months (95% confidence interval: 8.7,417.9)

Conclusion: These real-world results of ipilimumab were found to be slightly higher than the results obtained in phase III studies. Although phase III studies are very important in ensuring efficacy, the real world data are large added values that increase the generalizability of ipilimumab results in clinical practice.

Keywords: Immunotherapy, ipilumumab, metastatic malignant melanoma

SSB-10

Prognostic Factors Retrospective Single Center Results in Relapsing High Grade Glial Tumors Treated Systemically

Özkan Alan,[1] Tugba Akın Telli,[1] Tugba Başoğlu Tüylü,[1] Özlem Ercelep,[2] Serap Kaya,[2] Nalan Akgül Babacan,[2] Beste Melek Atasoy,[3] Dilek Gül,[3] Süheyla Bozkurt,[4] Faysal Dane,[1] Perran Fulden Yumuk[1]

[1]Department of Oncology Marmara University, Medical Faculty, Istanbul; [2]Department of Medical Oncology Marmara University Pendik Training and Research Hospital, Istanbul; [3]Department of Radiation Oncology, Marmara University Faculty of Medicine, Istanbul; [4]Department of Pathology, Marmara University Faculty of Medicine, Istanbul

Introduction: The most common primary brain tumors in adults are gliomas. High grade gliomas have poor prognosis. It is divided under two groups as Anaplastic Glioma (anaplastic astrocytoma / anaplastic oligodendrioglioma) and Glioblastoma Multiforme (GBM).

Method: In our study, 105 patients with high grade Glioma who were admitted after relapse and who have received systemic treatment between the dates of January 2012 and March 2018 were evaluated. They were studied in terms of Ecog, age, sex, pathology sub-type, presence of IDH 1 and Atrx mutations, type of surgical resection, and side effects after systemic treatment (deep vein thrombosis, hypertension, proteinuria) prognostic factors.

Findings: The median age was 48 years (min 17-max 77) at the time of diagnosis and 68% of the patients were male. 48% of the patients underwent maximal debulking surgery. The most common pathological sub-type was Glioblastoma Multiforme (Table 1). The mean follow-up period was 13.7 months (min1-max 68.9 months). 76% of the patients had progression after systemic treatment during the follow-up period. Fourteen of the patients were applied with secondary care treatment after progression. The median progression-free survival (PFS) and overall survival (OS) were 6 months and 7.8 months, respectively. The six-month PS ratio was 51% and 12 months OS ratio was 38%. The presence of Ecog, IDH mutation and Atrx mutation, deep venous thrombosis after systemic treatment, hypertension, and proteinuria development were found to be statistically significant on PS in the single variable analysis ($p<0.05$). The development of Ecog and proteinuria was found to be an independent good prognostic factor in the multivariate analysis. The presence of ATRX mutation was found to be an independent prognostic factor ($p=0.014$). It was found that ECOG and hypertension were independent prognostic factors when we evaluated them with multivariate analysis in regards to the overall survival ($p<0.5$). The presence of ARTX mutation was found to be as an independent bad prognostic factor ($p=0.004$).

Discussion: Our study was consistent with the literature and the ATRX mutation was found to an effective prognostic factor on PS and OS.

Keywords: Prognostic factors, glioblastoma multiforme, atrx mutation

SSB-11

The Prognostic Importance of PET CT SUVmax in Diagnosis at Metastatic Gastric Cancer

Abdullah Sakin,[1] Çağlayan Geredeli[2]

[1]Department of Onchology, Yüzüncü Yıl University Faculty of Medicine, Van; [2]Department of Medical Oncology, Health Sciences University, Okmeydanı Training and Research Hospital, Istanbul

Introduction: Gastric cancer is the fifth most common cancer in the world and is the third cause of cancer-related deaths. 18F-fluorodeoxy glucose (FDG) positron emission tomography-computed tomography (PET / CT) is widely used for the evaluation of stage, follow-up and treatment response in various malignancies. Although 18F-FDG PET is clinically useful in detecting relapse after surgical resection in gastric cancer, its role in gastric cancer is controversial. We examined the effect of FDG PET BT suvmax value at the time of diagnosis on the survival of patients whom we followed-up and treated due to the diagnosis of metastatic gastric cancer in the oncology clinic of our hospital in our study.

Material: Patients diagnosed with metastatic gastric cancer between 2009-2017 were retrospectively included in the study. The SUVmax value of the primary mass of in patients' PET CT which was taken before the treatment was taken. Patients were grouped as <10 and ≥10 based on their SUV max values. SPSS 22.0 for Windows was used for statistical analysis.

Results: 54 patients 20 of whom were 20 (37.0%) were female and 34 of whom (63.0%) were male were included in the study. The mean age was 61,2 (26-86). Palliative support treatment was administered to 4 patients (9.3%). 47 (87.0%) patients died during the follow-up (Table-1). It was detected that the median survival was 13.0 monts in patients who received chemotherapy, 26.0 months in patients who were her-2 (+++), 11.0 months in patients with TYH adenocarcinon and 11.0 months in female patients (Table-2).The median survival in the group whose PET CT SUVmax value was <10 was 9 months and was 14 months in the group whose PET CT SUVmax value was ≥10 as well as it was statistically significant (log rank p=0.012) (Figure)

Conclusion: It was observed that survival was longer in patients whose PET CT SUV max value was high in our study. We think that this difference is probably due to the fact that TYH adenocarcinoma does not involve FDG and due to the high number of the patients with low ECOG performance score in the group with low SUV max value.

Keywords: Gastric cancer, PET-CT, chemotherapy, SUVmax

SSB-12

Relation Between Sarcopenia and Dose-Limiting Toxicity in Patients with Metastatic Colorectal Cancer Who Received Regorafenib

Ali Gökyer, Ahmet Küçükarda

Department of Medical Oncology, Trakya University Faculty of Medicine, Edirne

Colorectal cancer is the fourth most common cancer type in the world and its mortality rate is quite high. The expected 5-year survival at the metastatic stage is around 12%. Regorafenib, a multicinase inhibitor, inhibits tumor cells and the reaction with the stroma as well as halts tumor growth and metastasis. Sarcopenia has been associated with poor performance, short life span and certain drug toxicities in cancer patients. Side effects depending on regorafenib (diarrhea, hand-foot syndrome, rash, hypertension, fatigue) usually prevent the use of the medicine at full dose. We evaluated the relationship between pre-regorafenib sarcopenin and dose-limiting toxicity in our study.

36 patients with metastatic colorectal cancer who were followed up in our clinicand who started to use regorafenib were included in the study. The sarcopenia index was calculated by the proportion of the patient's muscle region (cm2) measured from the L3 vertebra level in the pre-medication abdomen tomography and height of the patient. The cut-off value was determined as ≤31 cm2/m2 in female patients and ≤49 cm2/m2 in male patients on the basis of the studies in the literature. Clinical features and tumor characteristics of the patients were recorded. The relationship between progression-free sur-

vival (PFS), overall survival (OS) duration and sarcopenia, dose-limiting toxicity were statistically evaluated.

22 of 36 patients included in the study were male. Basal sarcopenia was observed in 23 of the patients. Median survival was 24.2 weeks in patients with sarcopenia and 28.1 weeks (p=0.36) in patients without sarcopenia. Progression-free survival periods were seen as 14.2 weeks in patients with sarcopenia and 14.8 weeks (p=0.65) in patients without sarcopenia. Dose-limitig toxicity was observed in 13 individuals among patients with basal sarcopenia (p=0.005).

Measurement of basal sarcopenia can be a predictive factor for dose-limiting toxicity whic may occur during the follow-up in patients with metastatic colorectal cancer who will start to use regorafenib. These patients could use the medicine at low dose and dose of the medicine could be gradually increased.

Keywords: Sarcopenia, regorafenib, dose-limiting toxicity

SSB-13

Prognostic Value of Systemic Immune Index in Patients with Metastatic Gastric Cancer

Hacer Demir,[1] Yavuz Katırcılar,[2] Mevlüde İnanç,[3] Saliha Karagöz Eren[4]

[1]Department of Medical Oncology of Faculty of Medicine of Afyon Health Sciences University, Afyonkarahisar; [2]Internal Medicine Clinic of Kayseri State Hospital; Kayseri; [3]Department of Medical Oncology of Faculty of Medicine of Erciyes University, Kayseri; [4]Department of General Surgery, Kayseri State Hospital, Kayseri

Introduction: Some quick and cost-free inflammation-based parameters such as neutrophil lymphocyte ratio (NLR), platelet lymphocyte ratio (PLR) and systemic inflammation index (SII) which could be examined under polyclinic conditions were used in determining the prognosis of different types of cancer(4,5). However, the studies on gastric cancer are quite limited. We aimed to evaluate whether the systemic immune index has a prognostic significance in patients with metastatic gastric cancer or not in this study.

Patient and Method: Totally 253 patients with metastatic gastric cancer whose pre-treatment hemogram values and follow-up data were recorded between 2006-2017 in Medical Oncology Clinic of Kayseri Education and Research Hospital were included in the study. Patients who used steroid that could affect hemogram parameters and who had an active infection during the diagnosis were not included in the study. SII which is one of the hematological parameters of the patients was calculated via platelet X (neutrophil / lymphocyte) formula and those with an optimal cut off value of ≥660 were considered high in consistency with previous studies. The Kaplan Meier curve was used in determining the effect of SII on the overall survival (OS) and the Log Rank test was used to compare the survival rates. 86 of the 253 patients included in the study were female (34%), 167 were male (66%) and the median age was 62 (27-88). Median OS was calculated as 12 months (0-136). Any relationship between age, gender, body mass index and survival was not detected; but a statistically significant relationship between SII value and OS was detected. IT was found that the median OS was 14 months in patients with SII <660 and 8 months in patients with SII ≥660 (p=0.007).

Conclusion: We found that high SII index can predict OS as a simple, cost-free and independent marker in patients with metastatic gastric cancer in our study. However, our hypothesis needs confirming through well-attended and prospective studies in order that it be used in routine clinical practice.

Keywords: metastatic gastric cancer, systemic immune index, prognosis

SSB-14

Effect of Primary Tumor Resection on Survival in the Stage IV Gastroenteropancreatic Neuroendocrine Tumors

Derya Kıvrak Salim

Department of Medical Oncology, SBU Antalya Education and Research Hospital, Antalya

Introduction: Gastroenteropancreatic neuroendocrine tumors (GEPNET) are rare and have heterogeneous behavior. Although they are generally slow, more than half of the patients apply due to distant metastatic disease. The benefit of palliative resection of the primary in stage IV disease is still controversial.

Objective: The aim of this study was to investigate the effect of the palliative resection of primary tumor on progression-free survival (PFS) and overall survival (OS) in patients with stage IV GEPNET. Secondary aim was to determine the prognostic factors which are effective on PFS and OS.

Method: This study was retrospectively conducted at the SBU Antalya Education and Research Hospital. All the patients who underwent and did not undergoo resection of primary tumor diagnosed with stage IV GEPNET as well as whose records could be achived were included in the study. Resection of metastases was excluded from the study. Kaplan-Meier method and log-rank test were used for the analysis of survival differences. Cox proportional hazards regression model was used for determination of independent prognostic factors.

Results: 53 patients were included in the study and demographic features were shown in Table 1. The mean age of the group in which resection was applied was found to be younger (respectively, 52±15.77 and 55.88±13.89, p=0.352). Overall survival could not be achieved in the group in which primary resection was applied, the median OS was found to be 30 months in the group in which resection was not applied (p=0.001) (figure 1). Median PFS was respectively 14 months versus 60 months (p=0.013). The fact that primary was not resected and was a high grade tumor was found to be predictive for shorter survival independently from other factors in multivariate analysis (respectively, HR:4.6; 95% CI: 1.21-17.47 and HR:10.1; 95% CI: 1.15-88.84) (table2). Effects of age (p=0.131), gender (p=0.051), chromogranin level (p=0.104), Ki 67 ratio (p=0.550), tumor diameter (p=0.623) and primary tumor focus (p=0.154) on overall survival were followed-up.

Conclusion: PFS and OS were found to be longer in the group whose primary focus was resected than in the group whose primary focus was not resected.

Keywords: GEPNET, primary tumor resection, survival

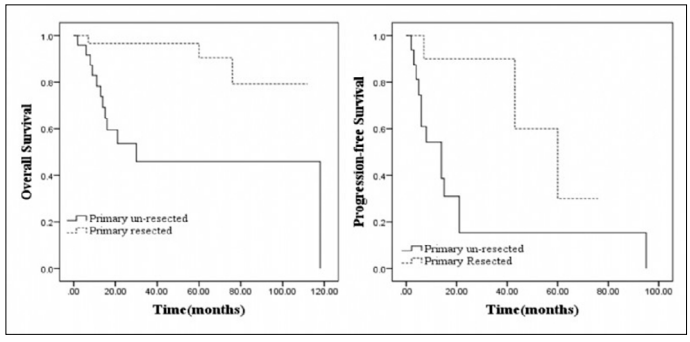


Figure 1. OS and PFS.

SSB-15

The Relationship Between Polymorphic Changes Observed in Tumor Necrosis Factor-Alpha Gen's Promoter Methylation Status and Promoter Region with Laryngeal Cancer

Sevde Cömert,[1] Sena Şen,[1] Can Doruk,[2] Murat Ulusan,[2] Semra Demokan[1]

[1]Department of Basic Oncology, Istanbul University, Oncology Institute, Istanbul; [2]Department of Otorhinolaryngologic Diseases, Istanbul University Istanbul Faculty of Medicine, Istanbul

Objective: Cytokines are important inflammatory mediators that directly or indirectly play a role in the development of malignancy. Tumor Necrosis Factor-Alpha (TNFA) is a proinflammatory cytokine that functions in inflammatory and infectious diseases. It activates polymorphonuclear leukocytes and cytotoxic agents against tumor cells, regulated the immune response as well as functions in angiogenesis and apoptosis. Laryngeal cancer (LC) is the second most common type of cancer among head and neck cancers. Any

study examining the relationship between TNFA promoter methylation and polymorphic changes in the promoter region with LC is not available in the literature. It was aimed to examine the polymorphism change and methylation status in promoter region of TNFA gene in patients with LC in our study (IU-BAP-TYL-2017-23885).

Method: Polymorphism in the promoter region was examined by using primaries pertain to polymorphic regions and restriction enzymes in the DNA samples obtained from lymphocytes of 50 patients diagnosed with LC. Methylation status was examined through the techniques of cutting mathylation-specific restriction enzyme in the DNA samples obtained from tumor/conjugate normal tissues of the same patients. Theoutcomes obtained from polymorphism/methylation experiments were compared with clinical parameters.

Results: Genotypes and allele frequencies of polymorphic regions were compared between control and patient groups. It was observed that GG genotype was often seen in patients at statistically significant rate (GG vs GA+AA: OR (95% CI)=0.19 (0.06-0.59), p=0.002, χ^2=9.01), the risk is significantly low risk in individuals having A allele [G vs A: OR (95%CI)=0.35 (0.14-0.85), p=0.018, χ^2=5.63], when the -308 G > A polymorphism was examined. Any significancy was not observed between polymorphic changes and clinical parameters. The incidence level ofTNF promoter methylation in tumor and conjugate normal tissue of patients was observed to be 84% (42/50) and 56% (28/50). A statistically significant difference was found between promoter methylation status and late stage (III-IV) (p=0.023).

Conclusion: Homozygous variant was observed to be associated with low risk of disease. It is thought that methylation observed inTNF gen promoeter plays role in laryngeal carcinogenesis.

Keywords: TNFA, methylation, polymorphism, laryngeal cancer

SSB-16

Comparison of the Clinicopathological Features of 1725 Patients with Right and Left Colon Cancer

Kaan Helvaci,[1] Emrah Eraslan,[2] Fatih Yıldız,[2] Gülnihal Tufan,[2] Umut Demirci,[2] Ömür Berna Öksüzoğlu[2]

[1]Department of Medical Oncology, Hitit University Faculty of Medicine, Corum; [2]Dr. Abdurrahman Yurtaslan Ankara Oncology Education and Research Hospital

Introduction: Colon cancers can be divided into right colon cancers (right CC) and left colon cancers (left CC) based on the location of the primary tumor; these indicate embryologic, epidemiologic, physiologic, pathologic, genetic and clinic features (1). The aim of this study was to investigate the differences between rightCC and leftCC in terms of clinicopathologic features.

Material and Method: The data of all patients who were followed up and treated due to colon cancer between 2008-2017 in the Medical Oncology Clinic of Ankara Oncology Hospital were retrospectively reviewed. Data of 1811 patients were achieved as a result of reviewing, 86 patients with localized transverse colon were excluded from the study and 1725 patients were included in the analysis.

Results: The mean age of the patients was 64±12 (in the range of 24-99 years) as well as 1013 (58.7) were male and 712 (41.3%) were female. 83.2% of the patients had leftCRC (n=1436) and 16,8% of them had right CC (n=289). Those who had rightCC and leftCC were found to be similar in terms of gender and age distribution (Table 1). The high rates of the patients with rightCC whose ECG performance score was 2, who were at diagnostic stage II or IV, whose pathological diagnosis was with signet-ring cell or mucinous adenocarcinoma, who had poor differentiation, perineural invasion and BRAF mutation were statistically significant. The rate of surgical margin positivity was lower in patients with rightCC. While perinural invasion was higher in patients with right CC, there was no difference between rightCC and leftCC in terms of lymphovascular invasion. (Table 2). There was no difference between the groups in terms of metastasis rate and liver metastasis.

Conclusion: As a result, there are various clinicopathological differences between rightCC and leftCC. This is reflected on differences of prognosis and survival. It is accepted that rifgtCC has a poorer prognosis and survival (2-4).

Keywords: Right colon, left colon, clinicopathological feature

Table 1. General characteristics of patients with right and left colon cancer

	rightCC (n=289) (%)	leftC (n=1436) (%)	p
Gender			
Male	166 (57.4)	847 (59.0)	
Female	123 (42.6)	589 (41.0)	0.627 *
Age, year	67 (58-74)	65 (57-73)	0.066 **
Family History of Colon Cancer			
None	219 (82.6)	1127 (87.8)	
Available	46 (17.4)	156 (12.2)	0.023 *

* Chi-Square; ** Mann Whitney U Values are given as numbers (%) or median (Q1-Q3) RCC: right-sided colon cancers, LCC: left-sided colon cancers

Table 2. Clinic and histopathologic features in patients with right and left colon cancer

	rightCC (n=289) (%)	leftC (n=1436) (%)	p
ECOG performance score:			
0	24 (8.3)	168 (11.7)	
1	211 (73.0)	1050 (73.1)	0.139 *
2	44 (15.2)	167 (11.6)	0.027 *
3	10 (3.5)	51 (3.6)	0.439 *
Pathologic Diagnosis:			
Adenocarcinoma	238 (82.4)	44 (15.2)	
Singlet-Ring Cell	7 (2.4)	8 (0.6)	0.002 *
Mucinous Adenocarcinoma	44 (15.2)	105 (7.3)	<0.001*
Diagnostic Stage:			
I	14 (4.8)	143 (10.0)	
II	107 (37.0)	362 (25.2)	<0.001*
III	83 (28.7)	584 (40.7)	0.220 *
IV	85 (29.4)	344 (24.0)	0.002 *
Lymphovascular invasion	34 (16.0)	119 (12.1)	0.124 *
Perineural invasion	46 (21.7)	157 (16.0)	0.046 *
Differential Degree			
Well-Differentiated	41 (23.0)	262 (32.8)	
Medium Differentiated	113 (63.5)	494 (61.8)	0.055 *
Poorly-Differentiated	24 (13.5)	43 (5.4)	<0.001*
Surgical border:			
Negative	274 (99.6)	1298 (96.9)	
Positive	1 (0.4)	41 (3.1)	0.033 *
KRAS:			
Wild	47 (56.0)	231 (55.5)	
Mutant	37 (44.0)	185 (44.5)	0.943 *
NRAS:			
Wild	27 (87.1)	122 (80.8)	
Mutant	4 (12.9)	29 (19.2)	0.410 *

* Chi-Square; ** Mann Whitney U Values are given as numbers (%) or median (Q1-Q3) RCC: right-sided colon cancers, LCC: left-sided colon cancers

SSB-17

The Importance And Prognostic Value of Somatostatin Receptor Expression in Meningiomas

Şahin Laçin,[1] Nilgün Söğütçü,[2] Abdurrahman Çetin[3]

[1]Department of Medical Oncology, Gazi Yaşargil Education and Research Hospital, Diyarbakir; [2]Department of Pathology, Gazi Yaşargil Education and Research Hospital, Diyarbakir; [3]Department of Neurosurgery, Gazi Yaşargil Education and Research Hospital, Diyarbakir

Objective: Somatostatin receptors have been shown to be expressed in meningiomas in many studies. Moreover, the presence level of these receptors carries a diagnostic value and can be used for determination of prognosis and treatment. Our aim at working with this single center is to determine the somatostatin receptor expression in patients diagnosed with meningioma and determine the relationship between age, gender, tumor histology and uptakeregions of the patients.

Material and Method: Tumor grading was carried out as grade I-III based on WHO (World Healht Organization) classification. Tumor tissues were embedded into paraffin after they were kept in 10% formalin and prepared by dividing them into 4 µm sections within the following-up period for immunohistochemical analysis. Normal human pituitary tissue was used as a positive control and negative control was achieved by substitution of primary antibodies with isotonic.

Results: It was detected that the median age of all patients was 53±13.6 years, median age of female patients was 54.02±13.2 years and median age of male patients was 49.5±14.7 years. It was detected that overall survival period of patients was 91.4 months, there was a statistically significant difference between survival periods based on their genders as well as the survival periods of female and patients and men were respectively 100.2 and 45.7 months (p=0.02). Any difference in survival periods between the negative and positive groups according to the somatostatin receptor staining status. It was detected in receptor negative group as 95.5 months and as 64.6 months in the positive group (p=0.066). Mean tumor diameter was detected as 4.2±2.1 cm in receptor positive patients and as 4.1±2.2 cm in receptor negative patients according to the somatostatin receptor staining status and any significant difference was found (p=0.879). The mean follow-up period was detected as 53 months.

Conclusion: The prevalence of the disease was found to be predominant in female gender in our study in consistency with the literature. Although gender and age were found to be prognostic factors, the relationship of somatostatin receptor expression with survival was not found. In this sense, more comprehensive studies where patient distribution is well-conducted are required.

Keywords: Meningioma, somatostatin, grade, survival, receptor

SSB-18

Replication of NF1 (Neurofibromatosis type 1) Protein in E.coli Bacteria for Antibody Development

Burcu Çakar,[1] Eric Chang,[2] Matthew Ellis[2]

[1]Faculty of Medicine of Ege University, Tülay Aktaş Oncology Hospital, Izmir; [2]Baylor College of Medicine, Lester Sue Smith Breast Center, Houston, Texas

Objective: Neurofibromatosis type 1 is a common familial-transit tumor predisposition syndrome. It occurs once in 3000 births. NF1 binds to the GTP via the GAP domain, causes GTP hydrolysis and inactivates the ras signal path. It was seen that somatic NF1 mutations were associated with a poorer prognosis, most of the mutations were nonsense/frameshift mutations and mutations were not specific to the GAP domain in breast cancer patients treated with adjuvant tamoxifen treatment. It was aimed to develop antibody which could immunohistochemically detect the somatic NF1 mutation in order to detect it in tumor tissues.

Method and Materials: GST-marked expression vector of the NF1 C terminal protein was generated. The achieved plasmid was transformed into E. coli bacteria. Different IPTG (isopropyl-β-D-thiogalactopyranoside) concentrations and E.coli bacteria were replicated in cell density (OD) in order to express the fusion protein in E.coli (Figure 1). Since the majority of the achieved protein was not soluble, a high volume (2 liters) of E. coli bacteria was replicated and it was aimed to reach a sufficient protein level.

Results: After the optimal IPTG and OD were determined, bacteria were replicated at 37 C during the night in large flasks, then the cell pellet was achieved through centrifugation. The resulting pellet was diluted via lysis buffer and the cells were ruptured via sonicator. NF1 C-GST protein was provided to be bound via GST-bound beads. The protein was concentrated via Centricon, then dialysis was applied to the protein during the night. The achieved concentration of the protein was determined. A concentration of about 1.1 mg/ml was achieved. (Figure 2) The achieved protein was injected into the mouse and rabbit for the production of monoclonal and polyclonal antibody.

Conclusion: The antibody formation process is still in progress. The first achieved antiseras were tested and it was observed that they functioned.

Keywords: Neurofibromatosis type 1, breast cancer, antibody development

SSB-19

Efficacy of Bendamustine in Patients with Relapsed or Refractory Lymphoma in Turkey; Turkey's Oncology Group (Tog) Study

Nuri Karadurmuş,[1] Semra Paydaş,[2] Ece Esin,[3] Zeki Gokhan Sürmeli,[4] Birol Yıldız,[1] İsmail Ertürk,[1] Erdinç Nayır,[5] Mutlu Doğan,[6] Ahmet Taner Sümbül,[7] İbrahim Barışta,[8] Gökhan Özgür,[9] Şükrü Ozaydin[1]

[1]Department of Medical Oncology, University of Health Sciences, Gulhane Education and Research Hospital, Ankara; [2]Department of Medical Oncology, Faculty of Medicine of Cukurova University, Adana; [3]Department of Medical Oncology, Health Sciences University, Dr. Abdurrahman Yurtaslan Education and Research Hospital, Ankara; [4]Department of Medical Oncology, Medicalpark Hospital, Ankara; [5]Department of Medical Oncology, Medicalpark Hospital, Mersin; [6]Department of Medical Oncology, University of Health Sciences, Numune Education and Research Hospital, Ankara; 7Department of Medical Oncology, Faculty of Medicine of Baskent University, Adana; [8]Department of Medical Oncology of Faculty of Medicineof Hacettepe University, Ankara; [9]Department of Hematology, University of Health Sciences, Gulhane Education and Research Hospital, Ankara

Objective: We aimed to investigate the efficacy and side effects of bendamustine in patients with relapsed/refractory lymphoma.

Methods: In this retrospective study, several patients with relapse/refractory Hodgkin's lymphoma (HL) and Non-Hodgkin's lymphoma (NHL) who underwent chemotherapy were included. The primary endpoint is to determine the objective response rates and toxicity.

Results: 99 patients whose median age was 59,8 were included in the study. Eighty-one patients had NHL (follicular lymphoma: 10, diffuse large B-cell lymphoma: 27, mantle-cell lymphoma: 18, marginal zone lymphoma: 9, small lymphocytic lymphoma / chronic lymphocytic leukemia: 17) and 18 patients had HL. Patients had received median three-line chemotherapy (range 2 to 8), except autologous hematopoietic stem cell transplantation (OHKHT) before and OHKHT was applied to 19 patients (HL: 11, NHL: 8). Objective response rate (ORR) was 74.3%, complete response rate was 57% (n=53), and partial response rate was 16.6% (n=19). The 1-year overall survival rate (S) was 74.6%. The 1-year progression-free survival rate (PFS) was 62.5%. The most common side effects were lymphopenia, anemia and neutropenia. The side effects observed at the third degree and higher level were lymphopenia (14.1%), neutropenia (10.1%) and fatigue (7.1%).

Conclusions: ORR of Bendamustine was found as 74.3% in relapsed / refractory HL and NHL patients. Bendamustine seems to be an effective option as a recovery therapy for patients who have previously received more than one treatment line.

Keywords: Bendamustine, Hodgkin's lymphoma, lymphoma

SSB-20

The Status of RAS Mutation and Relationship Between Tumor Localization and PET-CT 18F-FDG Uptakein Advanced Stage Colorectal Cancer

Bediz Kurt İnci, Fatih Gürler, Mukaddes Yılmaz, Gözde Tahtacı, Ozan Yazıcı, Aytuğ Üner, Ahmet Özet, Nazan Günel

Department of Internal Medicine of Gazi University Hospital, Department of Medical Oncology, Ankara

Objective: The genetic structure of the primary-metastatic mass and the cell metabolism may be different in metastatic colorectal cancer (mCRC). IT is thought that cell-level glucose metabolism may be different due to the the difference in prognosis of RAS wild and mutant patients in mRCC. We aimed to compare PET-CT 18F-FDG uptakelevels with respect to K-NRAS mutation status and primary-metastatic mass localization.

Method: Our study is a retrospective cohort analysis in which the RAS mutation status was studied staging-oriented 18F-FDG/PET-CT was conducted and in which mCRC patients were included.

Results: Demographic information and distribution of 110 patients included in the studyare shown in the Table 1. K-RAS mutation was studined in 82 patients; 54 patients (65.9%) were detected to be wild and 28 patients (34.1%) were detected to be mutant. N-RAS mutation was detected to be wild in 32 of 35 patients (91.4%). No significant difference was found between the standardized uptake values (suv max) of the metastatic regions of recurrent metastatic patients in diagnosis. Metastasis-primary tumor suv max values were similarly found to be independent from the RAS mutation. Suv max values of metastatic-primary lesions did not reveale any significant difference based on tumor localization. Suv max value of pulmonary metastases and OS were found to be inversely correlated (p=0.04). Suv max values of liver metastases of right colon tumors were found to be higher (p=0.03). Suv max >2 lung metastases (90% sensitivity and 71% specificity); suv max >4 liver metastases (87% sensitivity and 92% specificity) are predictive for mortality. Suv max values of lung (p=0.009) in the group in which CEA was high as well as liver, bone and peritoneal metastases in the group in which CA19.9 was high were found to be higher.

Conclusions: No significant relationship was found between RAS mutation status and FDG/PET suv max uptake in our study. However, suv max value play a predictive role in liver and lung metastases for mortality. This situation may form a vision for OS in mCRC. Providing a common opinion on the subject is possible through studies in which more patients are included and analyses containing different subgroups and disease status are evaluated.

Keywords: Colorectal cancer, PET-BT, RAS

SSB-21

Efficacy of Crizotinib in Patients with ALK Positive Advanced Stage Non-Small Cell Lung Cancer: A Real-World Experience from Turkey

Saadettin Kılıçkap,[1] Pınar Gürsoy,[2] Fatma Başol Buğdaycı,[3] Arzu Çam,[4] Umut Demirci,[5] Özkan Alan,[6] Ali Murat Tatlı,[7] Akın Öztürk,[8] Erdem Çubukçu,[9] İrfan Çiçin,[10] Mustafa Karaağaç,[11] Mehmet Küçüköner[12]

[1]Department of Medical Oncology, Hacettepe University Faculty of Medicine, Ankara; [2]Department of Medical Oncology, Suat Seren Chest Diseases Hospital, Izmir; [3]Department of Medical Oncology, Sanatoryum Atatürk Chest Diseases Hospital, Ankara; [4]Department of Medical Oncology, Ankara University Faculty of Medicine, Ankara; [5]Department of Medical Oncology, Abdurrahman Yurtaslan Oncology Education and Research Hospital, Ankara; [6]Department of Medical Oncology of Marmara University Faculty of Medicine, Istanbul; 7Department of Medical Oncology of Akdeniz University Faculty of Medicine, Antalya; [8]Department of Medical Oncology, Süreyyapaşa Chest Diseases Hospital, Istanbul; [9]Department of Medical Oncology of Uludag University Faculty of Medicine, Bursa; [10]Department of Medical Oncology of Trakya University Faculty of Medicine, Edirne; [11]Department of Medical Oncology, Konya Education and Research Hospital, Konya; [12]Department of Medical Oncology, Dicle University Faculty of Medicine, Diyarbakır

ALK mutation is observed in 4% of patients diagnosed with NSCLC. These patients benefit from ALK inhibitors. The present study aimed to evaluate the efficacy of crizotinib, an ALK inhibitor, and clinical characteristics of patients with ALK-positive NSCLC.

Method: Data of patients with ALK positive advanced stage NSCLC who were treated with crizotinib were retrieved from the hospital records.

Results: In this study, the data of 353 patients diagnosed with ALK-positive metastatic NSCLC and received crizotinib at any treatment line were analyzed. The mean age of the patients was 53.2±12.6 years [median, 53 years (21-85 years)] and 193 (54.7%) patients were male and 160 (45.3%) patients were female. Age at diagnosis was significantly higher in males than in females (54.8±11.8 years and 51.3±13.2 years, respectively; p=0.044). The rate of patients who never smoked was 50.1%. The most common histological subtype was adenocarcinoma (96%). Moreover, EGFR positivity was determined in three patients (0.9%). The frequency of brain metastasis at the time of diagnosis was 23.4%, whereas the frequency of bone metastasis was found to be 40.5%. The most common initial symptoms were cough (56%) and dyspnea (53%). The initial ECOG score was 0 or 1 in 80% of the patients. Crizotinib had been used in the 1st-line treatment in 37% of the patients, in 2nd-line treatment in 45% of the patients, in 3rd-line treatment in 12% of the patients, and in further lines of treatment in 6% of the patients.

SSB-22

Effect of Total Size of Lesions on Survival in Multicentric/ Multifocal Breast Cancer

Yusuf Karakas,[1] Ömer Dizdar,[2] Serkan Akın,[2] Öztürk Ateş,[2] Sercan Aksoy,[2] Mutlu Hayran,[3] İbrahim Halil Güllü,[2] Yavuz Özışık[2]

[1]Department of Medical Oncology, Hakkari State Hospital, Hakkari; [2]Department of Medical Oncology, Cancer Institute of Hacettepe University, Ankara; [3]Department of Preventive Oncology, Cancer Institute of Hacettepe University, Ankara

Introduction: 20% of breast cancers can be multicentric (MC) or multifocal (MF). According to the AJCC staging system, T stage of the tumor is determined based on the size of the largest lesion in the breast. However, there are data indicating that the total size of the lesions may be more valuable in determining prognosis. We investigated the prognostic value of the T stage based on the total size of lesions in cases with MF/MS breast cancer in comparison with the largest lesion size in this study.

Patient and Method: Pathology reports of breast cancer patients who were followed in Cancer Institute of Hacettepe University between 2003-2014 were examined. The T phase for MF/MS tumors was determined based on the largest lesion size (Tfirst) and the total of the longest diameters of the lesions (Tlast). The effects of both T stages on disease-free survival (DSF) and overall survival (OS) were investigated.

Results: Multicentric/multifocal tumor was detected in 323 (8,3%) of 3890 patients with breast cancer. 67 patients (20,7%) progressed from T1 to T2 and 63 patients (19,5%) progressed from T2 to T3 when the T-phase was determined by adding up the sizes of the lesions, 32 patients rose from AJCC stage I to stage II and 13 rose from stage II to stage III. The 10-year overall survival in patients with unifocal and multifocal/ multicentric tumor was found respectively as 75% and 74% (p=0.965) and 10-year DFS was found respectively as 66% and 61%, (p=0.817) (Figure 1). It was seen that disease-free survival curves of the patients with multifocal/multicentric tumor and whose stage rose from stage I to stage II (n=32) based on Tfirst and Tlast ovelapped more with disease-free survival curves of the patients with unifocal and stage I tumor especially in the first early 3-year period (Figure 2).

Conclusion: It was seen that the T-stage obtained by adding up the lesion sizes in multicentric/multifocal patients was not prognosticly superior to the classical staging and T-stage determined based on the largest lesion size for DFS was prognosticly more valuable especially in the first early 3-year period.

Keywords: Multifocal/multicentric breast cancer, T stage, prognosis

SSB-23

Prognostic Role of VEGF-A, PDGF-BB and c-MET in Patients with Metastatic Colorectal Cancer

Mevlüde İnanç,[1] Hatice Aslan Sırakaya,[2] Hatice Karaman,[3] Oktay Bozkurt[1]

[1]Department of Medical Oncology of Faculty of Medicine of Erciyes University, Kayseri; [2]Department of Internal Medicine of Kayseri Education and Research Hospital, Kayseri; [3]Department of Pathology of Kayseri Education and Research Hospital, Kayseri

Objective: We do not have a biomarker on which group of patients with metastatic colorectal cancer will benefit from anti-angiogenic treatment. We aimed to evaluate whether expression levels of VEGF-A, PDGF-BB and c-Met predict the bevacizumab-targeted treatment response or not.

Material and Method: 105 patients who received a diagnosis of metastatic colorectal cancer and received chemotherapy containing bevacizumab on the first step between 2006 and 2016 were included in the study. Expression status of VEGF-A, PDGF-BB and c-Met were evaluated via immunohistochemical method.

Results: The median age of the patients included in the study was 61 (24-83). Demographic characteristics of the patients are shown in Table 1. PFS duration of those who showed high and low expression of PDGF-BB was respectively (12 months; 10 months, p:0.16 (95% CI)), those who showed high and low expression levels of VEGF-A was respectively (11 months; 10 months, p=0.44 (%95 CI)) and those who showed high and low expression levels of c-MET was respectively (8 months; 13 months, p=0.005 (95% CI)) (Figure-1). Metastatic overall survival (mOS) in patients with high and low expression of c-Met was (21 months; 26 months, p=0.11 (95% CI)), with high and low expression of VEGF-A was (27 months; 18 months, p=0.05 (95% CI)), with high and low expression of PDGF-BB was (31 months; 21 months, p=0.16 (95% CI)) (Figure-2). 2,1-time increase was detected in the risk of death in patients with low expression of VEGF-A and 1,9-time increase was detected in the risk of death in patients with low expression of c-MET in the multivariate analysis conducted on mortality.

Conclusion: PFS was found to be short in patients with metastatic colorectal cancer who received bevacizumab-targeted treatment and the patients with high expression of c-MET. mOS was longer in patients with high expression level of VEGF-A. The risk of death was found to be 2,1 times higher in patients with low VEGF-A level and 1,9 times higher in patients with high expression of c-Met.

Keywords: Metastatic colorectal cancer, c-met, PDGF-BB, VEGFA

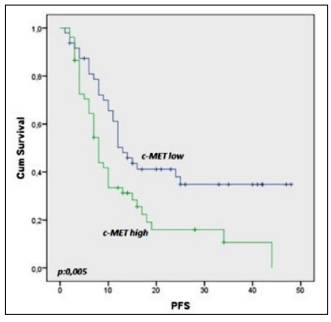


Figure 1. Relationship between C-Met expression levels and PFS.

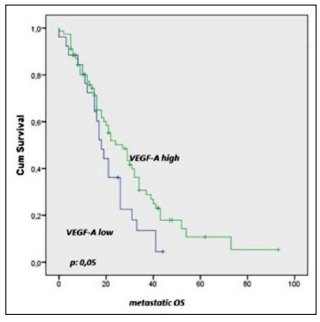


Figure 2. Relationship between VEGF-A expression levels and mOSK.

Table 1. Demographic features

Metastasis Regions	N (%)
Liver	
yes	78 (74,3)
No	27 (25,7)
Lung metastasis	
yes	50 (47,6)
No	55(52,4)
Brain metastasis	
yes	5 (4,8)
No	100 (95,2)
Primary surgery	
yes	88 (83,8%)
No	17 (16,2%)
Single region metastasis	46 (43,8)
Multiple-region metastasis	59 (56,2)
Chemotherapy protocol	
Folfox-bev.	25 (23,8)
Xelox-bev.	17(16,2)
Folfiri-bev	63 (60)
Vegf A high expres.	78 (74,3)
PDGF-BB high expres.	24 (22,9)
c-Met high expres.	52 (49,5)

SSB-24

Prognostic and Predictive Values of Inflammatory Markers in Metastatic Colon Cancer

Muhammet Bekir Hacıoğlu,[1] Süleyman Şahin[2]

[1]Department of Medical Oncology, Konya Education and Research Hospital, Konya; [2]Department of Medical Oncology, Van Education and Research Hospital, Van

Objective: The objective of the study is to investigate the relationship between neutrophil/lymphocyte ratio (NLR) identified as inflammatory markers, platelet count (PC) and mean platelet volume (MPV) with prognosis and RAS mutation.

Method: 61 patients with metastatic diagnosed with CRC in our centers were included in the study. Patients were divided into groups as wild type and mutant type based on RAS mutation. Inflammatory markers at the time of diagnosis, NLR, PC and MPV, were determined retrospectively from patient files. Survival analyzes were performed using the Kaplan Meier test and the relationship of inflammory markers were detected using Spearman Correlation analysis.

Results: 25 of 61 patients were female, 35 were male and the median age was 59. RAS was in wild type in 36 cases and in mutant type in 25 cases. 23 patients with RAS mutation had K-RAS mutation and 2 had N-RAS mutation. The tumor was located in the right colon in 11 cases and in the left colon in 49 patients. The median PC was detected as 318.000 mm^3 (min:129.000-max:836.000) and MTV was detected as 9.3 fL (min:6-max:12). Any statistically significant relationship was not detected in correlation analysis conducted in progression-free survival (PSC) and overall survival (OS) of NLR, PC and MPV (Table 1). Any correlation was not found between RAS mutation status and NLR, OS and MPV. A negative correlation was detected between NLR and OS in the RAS mutant group within the subgroup analysis (p=0.12) (Table 2, Figure 1).

Conclusion: A negative correlation was detected between NLR and OS in RAS mutant patients according to the results of our study. Accordingly, it can be stated that the prognosis of patients with high NLR in diagnosis is worse. The disadvantage of our study is that it was retrospective and the groups did not receive standard treatments. However, any relationship between inflammatory markers and PFS was not detected although they received treatments having similar efficacies in 1st stage therapy. The prospective planning of our study in larger patient groups may yield more meaningful results.

Keywords: Metastatic colorectal cancer, neutrophil/lymphocyte ratio, RAS mutation, average platelet volume, platelet count

SSB-25

How Are We in Metastatic Breast Cancer?

Deniz Tataroğlu Özyükseler,[1] Mustafa Başak,[1] Abdullah Sakin,[2] Emre Yıldırım[1]

[1]Department of Medical Oncology, Kartal Dr. Lütfi Kırdar Education and Research Hospital, Istanbul; [2]Department of Medical Oncology, Okmeydanı Education and Research Hospital, Istanbul

Breast cancer is the most common cancer among women in the world, it is also the most common cancer-related cause of death in women. Approximately 75% of breast cancer patients were hormone-positive and 25% of them were hormone-negative in the light of the studies conducted. There is a particular difference among disease free survival, local relapse and overall survival in hormone-positive breats cancer when it is compared to the hormone-negative group. HER2-positivity is detected in approximately 20% of patients diagnosed with breast cancer. HER2-positivity has a strong predictive value in treatment response. We aimed to determine the frequency, distribution of metastosis regions and survival analysis of metastatic breast cancer patients in our study. SPSS version 17.0 was used in the statistics of the study. Chi square test, anova and kaplan meier methods were used for statistical analysis. 500 patients who applied to the medical oncology clinic of our hospital at the metastatic stage or who passed to the metastatic stage in their follow-up were examined retrospectively in our study. 49,8% of the patients applied at the metastatic stage. The median age of the patients was 52 years and any significant difference between the groups was not observed.

Patients were divided into four subgroups based hormone receptor and HER2 status. The most common metastasis region was detected as bone (55.4%) in general. Bone metastases were most commonly seen in the hormone and HER2-positive group, while the hormone-positive HER2-negative group followed. Liver metastasis was the most commonly seen in the hormone-negative HER2-positive group (58%). Lung metastasis was the most commonly detected in the triple negative group (44.3%) Non-regional lymph node metastasis was the most commonly seen in the hormone-negative HER2-positive group. If we examine more rare metastasis regions; skin, leptomeningeal and pericardial involvement are the most frequently seen in the triple negative group. Brain, surrenal and bone marrow involvement were the most commonly found in the hormone-negative HER2-positive group. Median overall survival was 122.8 months with 95% CI (105.7-139.9).

Keywords: General survival, breast cancer, metastatic stage

SSB-26

Comparison of Survival and Pathological Universe Based on Seventh and Eighth TNM Staging Classification in Operated Non-Small Cell Lung Carcinomas: Single Center Experience

Ozlem Ercelep,[1] Özkan Alan,[2] Tuğba Akın Telli,[2] Tuğba Tüylü,[2] Nalan Babacan,[1] Serap Kaya,[1] Faysal Dane,[2] Tunc Lacin,[3] Emine Bozkurtlar,[4] Fulden Yumuk[2]

[1]Department of Medical Oncology, Marmara University Pendik Education and Research Hospital, Istanbul; [2]Department of Medical Oncology, Marmara University, Faculty of Medicine, Department of Medical Oncology, Marmara University Pendik Education and Research Hospital, Istanbul; [3]Department of Thoracic Surgery, Marmara University Faculty of Medicine, Marmara University Pendik Training and Research Hospital; [4]Department of Pathology, Marmara University Faculty of Medicine, Marmara University Pendik Training and Research Hospital

Objective: Staging in cancer provides identification and grouping of patients, as well as helps clinicians in determine the treatment options and predict treatment outcomes. We aimed to compare the prognostic difference between the seventh and eighth TNM staging of non-small cell lung cancer (NSCLC) in this study.

Method: The pathological staging and survival rates of 209 patients who were operated due to the diagnosis of NSCLC between 2006-2017 were retrospectively compared according to the seventh and eighth TNM classification. Metastatic patients, patients who were not operated, patients who received preoperative treatment, patients with low grade of malignancy (carcinoid tumor, adenoid cystic carcinoma) and patients diagnosed with neuroendocrine carcinoma were not included in the study. Clinical and pathological features (age, gender, smoking history, type of surgery, surgical margin, histological subtype, LVI, PNI, VI, visceral involvement, adjuvant therapy) and their effects on survival were evaluated.

Results: The median age of the patients was 62 (39-82), 84% (176/209) of te patients were male and the median follow-up period was 30 months. Presence of surgical margin positivity, lymphatic, perineural and vascular invasion were poor prognostic factors (p<0.05). Stage of 31 patients in stage 1A changed as 1A1,1A2.1A3 for respectively 3, 11, 7 patients according to TNM staging 7. 16 of 40 patients in stage 1B became stage 2A; 2 of 38 patients in stage 2B became 1B and 21 patients became stage 3A; 2 of 41 patients in stage 3A became 2B and 7 patients became 3B. When the stages were grouped (I-II-III), the TNM staging 7 (p=0.01) and 8 (p=0.22) were found to have similar prognostic effects.

Conclusion: The prognosis in lung cancer is not only associated with the anatomical extent of the tumor. Many factors such as comorbidity, molecular features, histological subtype are effective in survival. Any difference was not observed in survival based on the stage 7 and 8 of TNM staging system used in pathological staging of lung cancer in our study

Keywords: Non-small cell, lung cancer, staging, survival

SSB-27

Risk Factors Associated with Relapse in Non-Operatively Metastatic Renal Cell Carcinoma

Gökhan Uçar,[1] Yakup Ergün,[1] Yusuf Açıkgöz,[1] Ozan Yazıcı,[2] Nuriye Yıldırım Özdemir,[3] Doğan Uncu[1]

[1]Department of Medical Oncology, SBU Ankara Numune Education and Research Hospital, Ankara; [2]Department of Medical Oncology, Faculty of Medicine of Gazi University, Ankara; [3]Department of Medical Oncology, Faculty of Medicine of Yıldırım Beyazıt University, Ankara

Objective: We aimed to evaluate the risk factors associated with relapse after nephrectomy in non-metastatic renal cell carcinoma (RCC) in our study.

Method: Data of 85 patients who underwent nephrectomy due to non-metastatic RCC between 1997-2017 were retrospectively analyzed. The patients were divided into two groups with and without progression of relapse and the clinicopathologic risk factors associated with relapse were evaluated.

Results: 85 patients were included in the study and relapse was detected in 36 patients (42%). The median follow-up period was 4.6 years (0.2-20.3). The median age of the patients was 55.6 (22-81) and 67% of them were male. There was a difference between the two groups in terms of stage (p=0.01) and tumor diameter (p=0.001). The median disease-free survival (DFS) of all patients was 9.1 years (5.5-12.6). The relapse rates of patients in stage 1-2 and 3 were respectively 27%, 43% and 67% as well as the 5-year-median DFS was respectively 80%, 66% and 40%. The median DFS was found respectively as 12.6 years, 12 years and 2.7 years (p=0.001). 26% of the relapses were local and lung metastases were the most commonly detected in metastatic patients (49%). Stage 3 disease (OR:5.45, 95% CI 1.7-17.0, p=0.004) and increase in tumor diameter (OR:1.15, 95% CI: 1.01-1.32, =0.02) were detected to be risk factors associated with relapse in univariate logistic regression analysis. ROC analysis was carried out for the cut-off value of tumor diameter. The best cut-off value was found as 7.7 cm (sensitivity 55%, AUC 0.65, 95% CI: 0.52-0.77, p=0.02). It was found that only tumor diameter was longer than 7.7 cm and it was an independent risk factor (OR:12.1, 95% CI: 1.16-125, p=0.03) in multivariate regression analysis.

Conclusion: According to our data, increase in tumor diameter was the single independent risk factor that increased the risk of relapse in the operated non-metastatic RCC. Tumor diameter longer than 7.7 cm increases the risk by 12 times.

Keywords: renal cell carcinoma, tumor diameter, risk factors

Table 1. Patient characteristics

Characteristic	No relapse (n:49) (58%)	relapse Available(n:36) (42%)	p-value
Age, median year (range)	58.5 (30-79)	54 (22-81)	0.07
Gender			0.38
Male	31 (63%)	26 (72%)	
Female	18 (37%)	10 (28%)	
Smoking status			0.54
No	25 (51%)	16 (44%)	
Yes	24 (49%)	20 (55%)	
Localization			0.54
Right	25 (51%)	16 (44%)	
Left	24 (49%)	20 (55%)	
Nephrectomy type			0.26
Radical	35 (88%)	24 (77%)	
Partial	5 (12%)	7 (23%)	
Stage			0.01
Stage 1	30 (61%)	11 (32%)	
Stage 2	12 (25%)	9 (27%)	
Stage 3	7 (14%)	14 (41%)	
Tumor diameter, median cm	5 (1.-15)	8 (1.5-16)	0.01
<7.7 cm	40 (82%)	16 (47%)	
≥7.7 cm	9 (18%)	18 (53%)	
Furhman nuclear grade			0.56
Grade 1	7 (16%)	4 (12%)	
Grade 2	18 (40%)	11 (33%)	
Grade 3	11 (24%)	13 (39%)	
Grade 4	9 (20%)	5 (5%)	

Table 2. Multivariate logistic regression analysis of the factors associated with relapse progression

Variance	Odds ratio	95% Confidence Interval	p-value
Age (young)	0.95	0.90-1.01	0.15
Gender (male)	1.59	0.39-6.49	0.51
Localization (right)	0.65	0.16-2.52	0.53
Nephrectomy type (radical)	0.84	0.15-4.57	0.84
Furhman grade (grade 1)	0.2	0.01-3.14	0.20
Stage (Stage 3)	5.52	0.71-42.9	0.058
Tumor diameter (≥7.7 cm)	12.1	1.16-125	0.037

SSB-28

Evaluation of Quality of Life of Patients Before Chemotherapy and After First Stage Treatment: Pilot Study Results of Department of Medical Oncology of Pamukkale University

Umut Çakıroğlu,[1] Gamze Gököz Doğu,[1] Sema Taban,[2] Nail Özhan,[1] Serkan Değirmencioğlu,[1] Atike Gökçen Demiray,[1] Arzu Yaren[1]

[1]Department of Internal Medicine and Department of Medical Oncology of Faculty of Medicine of Pamukkale University, Denizli; [2]Department of Internal Medicine, Faculty of Medicine of Pamukkale University, Denizli

Objective and Method: The quality of life before and after chemotherapy of the patients who applied to Medical Oncology Clinic of Pamukkale University and started to receive chemotherapy were evaluated in our study. All patients with neoadjuvant, adjuvant, locally advanced and metastatic who received chemotherapy were included. The QLQ-C30 Quality of Life Scale developed by EORTC was used to determine the quality of life of the patients included in the sample. The EORTC-QLQ-C30 Quality of Life Scale was applied to the patients through the tecnique of face-to-face interview.

Results: 80 patients in total, 32 male and 48 female, who filled the questionnaires before chemotherapy and after the first line treatment were evaluated. It was seen that overall well-being status decreased from 72,18 points to 66,97 points when EORTC QLQ-C30 questionnaires were compared. A decrease was detected in mean scores of physical function and cognitive function, when the subgroup mean scores of functional status were evaluated. An increase was detected in scores of role function, emotional status and social status. It was seen among the subtypes of symptoms that mean scores of nausea-vomiting, pain, insomnia, loss of appetite, constipation and diarrhea scores decreased; while the mean scores of fatigue, dyspnea and economic difficulties increased.

Discussion: The decrease in well-being status was associated with the disease and difficult period of chemotherapy according to the quality of life scale. The decrease in physical and cognitive evaluation, which are the components of the functional situation, can be explained through more detailed evaluation of the side effects of chemotherapy on an individual basis. The reason of increase in the role function, emotional status and social status was thought to be the result of the support received by the patient's family and the people around her/him and the fact that some certain responsibilities are undertaken by the other family members. The decrease in the mean score of 6 of 8 parameters in which the symptoms were evaluated and the absence of deterioration despite the chemotherapy indicate that the supportive treatments are administered effectively. The increase in the score of economic difficulty was associated with requirement of meeting the needs related to the country's economic situation and decrease in overall well-being of patients.

Keywords: Quality of life, chemotherapy, EORTC QLQ-C30 Quality of Life Scale

SSB-29

Investigation of the Predictive Location of Hepatosteatosis on relapse and relapse Pattern in Breast Cancer: A Single-Center Retrospective Observational Study

Tülay Kuş,[1] Havva Yeşil Çınkır,[2] Gökmen Aktaş,[3] Hüseyin Abalı[4]

[1]Department of Medical Oncology, Adiyaman University Education and Research Hospital, Adiyaman; [2]Department of Medical Oncology, Gaziantep University, Şahinbey Research and Application Hospital, Gaziantep; [3]Department of Medical Oncology, Kahramanmaras Sütçü İmam University Faculty of Medicine, Kahramanmaras; 4Hematology and Oncology Center of Kind Hamad University, Bahrain

Objective: It has been indicated that breast cancer (BC) in remission can be evaluated under the heading of lifestyle change in addition to the traditional risk factors known in relapse and also poor dietary habits, obesity and sedentary lifestyle among the causes of insulin resistance are risk factors for relapse of BC. In this context, we aimed to investigate the predictive place of presence of hepatosteatosis which is mainly a manifestation of insuline resistance and which we can easily idenfity in our routine clinic practise in terms of relapse and relapse pattern via this study.

Method: Patients who had been followed-up, who were with the diagnosis of operative BC and who completed their adjuvant treatments since 2005 were retrospectively reviewed. Clinicopathologic features of patients, treatment they received, presence of obesity and diabetes and presence of hepatosteatosis in last follow-up or relapse period were recorded based on ultrasonography evaluation. Chi-square test was used for categorical changes and binary-logistic-regression analysis was used for relapse prediction.

Results: 49 patients were included in the study. The median follow-up period was 6.7 (0.6-13) years. The mean age was 48.2±0.5. 36% of the patients (n=154) were at stage III, 35.1% of them were obese and 4.5% of them had diabetes. relapse progressed in the rate of 34.6% and 38.1% of it was liver metastasis. Clinicopathologic features of the patients based on the presence of hepatosteatosis were summarized in Table-1. The rate of obesity and diabetes was statistically higher in the group in which Grad2&3 hepatosteatosis was followed. The parameters that can predict relapse and relapse of liver were summarized in Table-2. Accordingly; while age and stage were independent risk factors for relapse, the presence of grad2&3 hepatosteatosis was the only parameter predicting liver relapse (Odds ratio corrected via diabetes and obesity: 2.37 [1.0-5.4], p=0.039). The relapse patterns are shown in Figure-1.

Conclusions: Hepatosteatosis, which was found as predictive for liver metastasis, can be used as a predictive marker which can lead the clinician especially for the patients and young patients with high level of relapse risk at advanced stage as well as in respect of acting insistently about the changes in quality of life.

Keywords: Breast cancer, relapse, Predictive factors, Hepatosteatosis, Insulin resistance

Table 1. Demographic and histopathologic features of patients based on the level of hepatosteatosis

Parameters	Hepatosteatosis grad 2 or grad 3 N (%)	No hepatosteatosis or grad 1 exists N (%)	p
Age <40 >40	38 (22.1) 134(77.9)	70 (28.2) 178 (71.8)	0.16
Menopause status Premenapause Postmenopause	87 (50.6) 85 (49.4)	135 (54.9) 111 (45.1)	0.38
ER Positive Negative	132 (76.7) 40 (23.3)	180 (72.6) 68 (27.4)	0.33
PR Positive Negative	126 (73.3) 46 (26.7)	171 (69.0) 77 (31.0)	0.34
HER2 Positive Negative	46 (26.7) 126 (73.3)	71 (28.6) 177 (71.4)	0.67
Grede 1 2 3	12 (7.0) 87 (50.6) 73 (42.4)	22 (8.9) 128 (51.6) 98 (39.5)	0.71
Subtype Luminal A Luminal B Luminal B HER2+ HER2+ Triple negative	51 (29.7) 64 (37.2) 33 (19.2) 12 (7.0) 12 (7.0)	67 (27.0) 86 (34.7) 57 (23.0) 16 (6.5) 22 (8.9)	0.80
Pathology IDC ILC Other	157 (91.3) 7 (4.1) 8 (4.7)	229 (92.3) 12 (4.8) 7 (2.8)	0.58
Stage* 1a 1b 2a 2b 3a 3b 3c	7 (4.1) 25 (14.5) 54 (31.4) 24 (14.0) 15 (8.7) 38 (22.1) 9 (5.2)	13 (5.2) 47 (19.0) 56 (22.6) 40 (16.1) 29 (11.7) 52 (21.0) 11 (4.4)	0.44
Anthracycline+taxane Received Not received	157 (91.8) 14 (8.2)	218 (88.3) 29 (11.7)	0.24
Hormonotherapy Tamoxifen Tamoxifen+LHRH AI after Tamoxifen AI Triple negative	32 (18.6) 29 (16.9) 40 (23.3) 56 (32.6) 15 (8.7)	52 (21.0) 55 (22.2) 45 (18.1) 66 (26.6) 30 (11.1)	0.25
Diabetes Yes No	18 (10.5) 154 (89.5)	1 (0.4) 247 (99.6)	<0.001
Obesity (VKI) <30 ≥30	65 (46.1) 76 (53.9)	128 (63.7) 73 (36.3)	0.001

ER: estrogen receptor, PR: progesterone receptor, IDC. Invasive ductal carcinoma, ILC. Invasive lobular carcinoma, Tumor staging was carriet out based on TNM staging system of *8th version "American Joint Commitee on Cancer (AJCC)".

Table 2. The relationship between the clinicopathological features of patients and relapse and relapse of liver

	All recurrences				Recurrence through liver metastasis	
Parameters	OR (95%CI)*	P	OR (95%CI)**	P	OR (95%CI)	P
Age ≥40 <40	1 (ref) 1.92 (1.2-3.0)	0.004	1 (ref) 2.19 (1.3-3.8)	0.005	1 (ref) 1.36 (0.7-2.7)	0.39
Menopause status Postmenopause Premenapause	1 (ref) 1.24 (0.8-1.9)	0.30			1 (ref) 1.29 (0.6-2.6)	0.47
ER Positive Negative 1 (ref) 1.16 (0.7-1.8) 0.51 1 (ref) 1.59 (0.7-3.5) 0.24	1 (ref) 1.16 (0.7-1.8)	0.51			1 (ref) 1.59 (0.7-3.5)	0.24
PR Positive Negative	1 (ref) 1.01 (0.7-1.6)	0.96			1 (ref) 0.89 (0.4-1.9)	0.76
HER2 Positive Negative	1 (ref) 1.01 (0.7-1.6)	0.95			1 (ref) 0.48 (0.2-1.1)	0.07
Grade 1 2 3	1 (ref) 2.67 (1.1-6.7) 2.81 (1.1-7.2)	0.37 0.03	1 (ref) 0.69 (0.2-2.1) 1.66 (0.9-2.9)	0.08	1 (ref) 0.70 (0.1-4.1) 1.00 (0.2-5.9)	0.69 1.00
Genomic subtype Luminal A Luminal B Luminal B HER2+ HER2+ Triple negative	1 (ref) 0.91 (0.6-1.5) 1.07 (0.6-1.9) 0.85 (0.6-2.0) 1.11 (0.5-2.4)	0.72 0.82 0.71 0.79			1 (ref) 1.24 (0.5-2.8) 2.48 (0.9-6.8) 1.38 (0.3-6.5) 1.48 (0.4-5.2)	0.61 0.77 0.69 0.53
Stage 1a 1b 2a 2b	1 (ref) 2.57 (0.5-12.3) 3.44 (0.7-15.7) 3.80 (0.8-18.0) 6.58 (1.4-31.8)	0.23 0.11 0.09 0.019 0.002	1 (ref) 1.21 (0.2-6.4) 1.57 (0.3-7.9) 2.37 (0.5-12.6) 2.98 (0.5-16.7)	088 0.58 0.31 0.21 0.028	-	0.84
3a 3b 3c	11.3 (2.5-51.4) 14.6 (2.7-80.5)	0.002	6.05 (1.2-30.1) 7.52 (1.2-48.5)	0.034		
Histopathologic subtype IDC ILC	1.64 (0.4-6.6) 1 (ref)	0.49			1.54 (0.5-7.) 1 (ref)	0.51
Hepatosteatosis in Recurrence None Available Hepatosteatosis*** None Available	1 (ref) 1.50 (1.0-2.3)	0.048	1 (ref) 1.49 (0.9-2.5)	0.12	1 (ref) 2.34 (1.2-4.7) 1 (ref) 2.37 (1.0-5.4)	0.014 0.039
Diabetes None Available	1 (ref) 3.38 (1.3-8.8)	0.012	1 (ref) 2.68 (0.8-8.6)	0.098	1 (ref) 1.67 (0.5-5.8)	0.39
Obesity (VKI) <30 ≥30	1 (ref) 0.86 (0.6-1.4)	0.51			1 (ref) 1.21 (0.6-2.6)	0.61

ER: estrogen receptor, PR: progesterone receptor, IDC. Invasive ductal carcinoma, ILC. Invasive lobular carcinoma, *: Univariate "cox regression" analysis, ** multivariate "cox regression" analysis. OR: Odss ratio, HR: Hazard ratio, CI: Confidence interval. *** OR corrected via DM and obesity was calculated for hepatosteatosis in recurrence in the hepatosteatosis group, since DM and obesity ratios were higher in this group.

SSB-30

Management Algorithm and Evaluation of Clinical Importance of Incidental Thyroid Lesions Detected in 18F-FDG PET/BT

Tahir Yerlikaya,[1] Hasan Şenol Coşkun,[2] Sema Sezgin Göksu,[2] Adil Boz,[4] Ali Murat Tatlı,[2] Gökhan Karakaya,[2] Mustafa Kemal Balcı[3]

[1]Department of Internal Medicine, Faculty of Medicine of Akdeniz University, Antalya; [2]Department of Medical Oncology, Faculty of Medicine of Akdeniz University, Antalya; [3]Department of Endocrinology and Metabolic Diseases, Faculty of Medicine of Akdeniz University, Antalya; [4]Department of Nuclear Medicine, Faculty of Medicine of Akdeniz University, Antalya

Introduction: 18F-FDG PET/CT is the most common imaging method for the determination and reevaluation of stages of cancers and determination of treatment response. Thyroid cancer is the second most common after breast cancer in women in Turkey. Our aim was to evaluate the approach algorithm, clinical importance and malignity risk of focal or diffuse 18F-FDG uptakeincidentally detected in thyroid gland in FDG PET/CT in this study.

Method: 71 patients who had extrathyroidal malignant disease and FDG uptakewere evaluated retrospectively between January, 2015 and October, 2017. TFT was requested from all patients.. USG was applied to 69 patients. The definitive diagnosis was achieved through TFNAB and/or total thyroidectomy.

Results: 34 (47.9%) were male and 37(52.1%) were female among 71 patients. The mean age of the patients was 60.2±11.3. It was detected that 60 (84.5%) of these patients had focal, 6 (8.5%) had diffuse and 5(7.0%) had diffuse-focal FDG involvement. Malignancy was detected in 26.3% of the patient groups with focal uptakeand 2 patients with diffuse-focal involvement. Any malignancy was not detected in the patients whose diffuse uptakepattern were followed. 69 patients were evaluated through USG. A statistically significant relationship was found between results of high risks and malignancy based on sonographic features in thyroid USG (p=0.036). On the other hand, any statistically significant relationship was not found between the sizes of nodules in USG and benign or malign result of cytology. The risk of malignancy of thyroid lesions detected as incidental of 60 patients who were treated with TFNAB and/or TT was found as 26.7%. It was detected that 8 individuals had thyroid papilliary carcinoma (66.7%) and 4 individuals had metastatic involvement (33.3%) among 12 patients who were evaluated as malignant (3 patients had lung cancer metastasis and 1 patient had larynx cancer metastasis.). SUVmax1 values were significantly higher in patients with malignancy than benign patients group (p=0.03); but the relationship between SUVmax2 and possibility of malignancy was not found to be statistically significant (p=0.49 p<0.05).

Conclusion: Further evaluation of the FDG thyroid uptakedetected as incidentalis recommended.

Keywords: 18F-FDG PET CT, insidental thyroid node, thyroid cancer

SSB-31

Can Conventional Hematological Inflammation Parameters Predict Advanced Stage in Testicular Tumors?

Gökşen İnanç İmamoğlu, Tülay Eren

Department of Medical Oncology, Ministry of Health Dışkapı Yıldırım Beyazıt Training and Research Hospital, Ankara

Introduction: Recent studies have demonstrated the correlation between cancer and inflammation. Systemic inflammatory markers can be readily obtained from routine blood tests. In this study, we aimed to investigate the value of inflammatory markers in early stage testicular tumors and in patients at a more advanced stage.

Methods: The data of 78 patients who underwent inguinal orchiectomy between the years 2012-2018 were analyzed retrospectively. Preoperative staging was performed according to the available criteria. Considering CBC-based systemic inflammatory markers, neutrophils (N), monocytes (M), platelets (P) and lymphocytes (L); Neutrophil-lymphocyte ratio (NLR), platelet-lymphocyte ratio (PLR), lymphocyte-monocyte ratio (LMR) were calculated. Stage 1 tumors and advanced stage tumors that spread outside the testis were classified into two groups and the differences between inflammatory markers were calculated.

Results: NLR value was found to have a mean cut-off value of 2.91 in stage 1 disease, whereas the mean cut-off was 5.52 for higher stages (p=0.078). The mean PLR results were 115.9 in stage 1 disease and 200.4 in the advanced stages (p=0.030). When the cut-off value for PLR was determined as 106, the sensitivity of the probability of being in the advanced stage was 60% and the specificity was 52%. The mean LMR was 3.9 for stage 1 tumors and 2.8 in advanced stage disease (p=0.007). The likelihood of patients below the cut-off value of 3.05 for LMR to have a high grade had 74% sensitivity and 65% specificity.

Conclusion: The combined use and evaluation of all inflammatory biomarkers in testicular tumors may help clinicians to define poor prognostic criteria and to decide on the treatment.

Keywords: Germ cell tumors, inflammation markers, NLR, PLR, LMR

SSB-32

A rare case: Turcot Syndrome

Asude Aksoy,[1] Erhan Aygen,[2] Hamdi Sakarya,[2] Feyza Tan[3]

[1]Department of Medical Oncology, Fırat University, Faculty of Medicine, Elazığ; [2]Department of Surgical Oncology, Fırat University, Faculty of Medicine, Elazığ; [3]Department of Pathology, Fethi Sekin City Hospital, Elazığ

Genetically inherited events tend to occur at young ages and have atypical localization. Different mutations play a role in the etiopathogenesis of cancer (ca), and the degeneration of the DNA structure initiates the cascade of carcinogenesis. In colon ca, Lynch syndrome (HNPCC), which is characterized by germline / DNA mismatch repair enzyme mutations (MLH1, MSH2, MSH6, PMS2) in the APC gene / deletions in the EPCAM gene, can initiate the cancer cascade. HNPCC is responsible for 2-5% of colon cancer etiology, and 20% of familial colon ca cases. Turcot syndrome (TS) is a rare case with AD inheritance pattern in which colon and brain ca are seen simultaneously. In this study, a TS case is presented.

In the tests performed upon the complaints of constipation of a 19-year-old male patient who lost a sibling at an early age due to unknown causes, multiple polyps were observed in the ileum during colonoscopy, and their pathology was malignant. Thus, the patient underwent right hemicolectomy. The pathology was colon adenocarcinoma, and there was no distant metastasis. After the increase in CEA level after adjuvant CT, a mass in the cranial region (CR) of the abdominal midline was observed. The patient who was operated, was diagnosed with GBM and CRT adjuvant chemotherapy was given. Genetic evaluation was requested upon pathology reconsultation, which indicated "medullary colon ca". N ras, B raf, P53 gene, MLH1, MSH2, PMS2 were not mutated while K ras, MSH6 genes were found to be mutated. In the evaluation at the end of GBM therapy, the patient was operated for a second time due to the newly developed lesions at the CR. After a short period of non-follow-up, the patient had systemic recurrence and palliative CT was initiated.

The survival of the case diagnosed with medullary type colon adenocarcinoma with HNPCC at a young age was 39 months. The presence of GBM alongside the colon cancer in the mass at the CR suggested TS due to MSH6 mutation. In order to increase the awareness on genetically inherited diseases, anamnesis should be more comprehensive and genetic studies must be performed persistently.

Keywords: Colon cancer, brain tumor, Turcot syndrome

SSB-33

The Experience of Pazopanib in the Treatment of Metastatic Uterine Sarcoma

Veli Sunar,[1] Vakkas Korkmaz,[1] Öztürk Ateş,[2] Münevver Yılmaz,[3] Deniz Can Güven,[4] Zafer Arık[4]

[1]SBU Zekai Tahir Burak Women's Health Research and Training Hospital, Ankara; [2]SBU Dr. Abdurrahman Yurtaslan Ankara Oncology Training and Research Hospital, Ankara; [3]Department of Medical Oncology, Gazi University Faculty of Medicine, [4]Department of Medical Oncology, Hacettepe University Faculty of Medicine, Ankara

Objective: Uterine Sarcoma constitutes 3-9% of all uterine malignancies and has a poor prognosis. Pazopanib is an oral multikinase inhibitor and is the only tyrosine kinase inhibitor approved for the treatment of metastatic uterine sarcoma. In this study, we aimed to investigate the efficacy of pazopanib in the treatment of metastatic uterine sarcoma.

Method: The data of patients who received oral pazopanib 800 mg / day with diagnosis of metastatic uterine sarcoma at four oncology centers between May 2013 and June 2018 were analyzed retrospectively. The study included 28 patients with ECOG performance score <2, received least one cycle of chemotherapy for metastatic disease, and have evaluable disease at the beginning of treatment. The patients' progression-free survival (PFS), overall survival (OS) and response rates to Pazopanib treatment were evaluated retrospectively.

Results: The median age of the 28 patients included in the study was 53 (26-76) years. The histopathological diagnoses were as follows: 25 (89.3%) patients had uterine leiomyosarcoma, 2 (7.1%) patients had undifferentiated uterine sarcoma and 1 (3.6%) patient had high grade endometrial stromal sarcoma. The most common site of metastasis was lung (21 patients, 75%). The median duration of use of Pazopanib was 5 months (0.6-28.3). In 22 (78.5%) patients, the drug use was discontinued due to progression, whereas the treatment of 2 patients (7.1%) was discontinued due to toxicity. Response rates were as follows: Partial response was achieved in 4 (14.3%) patients and stable disease was achieved in 17 (60.7%) patients. The median progression-free survival of the patients was 5.2 months (95% CI 2.8-7.5) and their overall survival was 11.4 months (95% CI 3.4-19.5).

Conclusion: In this study where we evaluated the real life data of metastatic uterine sarcoma patients retrospectively, pazopanib treatment was found to be effective and our results were consistent with the literature.

Keywords: Pazopanib, sarcoma, uterus

SSB-34

The Relationship Between Clinicopathological Factors and Recurrence Score According to TAILOR x Risk Category in Patients with Hormone Receptor Positive Early Stage Breast Cancer

Kezban Nur Pilanci,[1] Ajlan Atasoy,[1] Erhan Gökmen,[2] Mustafa Özdoğan,[3] Nilüfer Güler,[1] Cihan Uras,[4] Engin Ok,[5] Orhan Demircan,[6] Abdurrahman Işıkdoğan,[7] Çetin Ordu,[8] Oben Duman,[3] Öztürk Ateş[9]

[1]Department of Medical Oncology, Istanbul Aydin University Faculty of Medicine, Istanbul; [2]Department of Internal Diseases, Medical Oncology, Ege University Faculty of Medicine, Izmir; [3]Department of Medical Oncology, Antalya Memorial Medstar Hospital, Antalya; 4Department of General Surgery, Acibadem Maslak Hospital, Istanbul; [5]Department of General Surgery, Erciyes University Faculty of Medicine, Kayseri; [6]Department of General Surgery, Acibadem Adana Hospital, Adana; [7]Department of Internal Diseases, Medical Oncology, Dicle University Faculty of Medicine, Diyarbakır; [8]Department of Medical Oncology, Gayrettepe Florence Nightingale Hospital; [9]Department of Medical Oncology, Dr Abdurrahman Yurtaslan Oncology Hospital, Ankara

Background: The Oncotype DX 21 gene recurrence score (RS) is commonly used, particularly in Western countries, in determining the prognosis and making the decision for adjuvant therapy in patients with early stage estrogen receptor (ER) positive, human epidermal growth factor receptor 2 (HER-2)-negative breast cancer. Due to its high cost, the use of this test is limited in Turkey, and treatment decision is usually made based on clinicopathological factors. In this study, we aimed to classify Oncotype DX RS in early stage breast cancer patients according to TAILOR x risk category and to show its correlation with clinicopathological factors.

Materials and Methods: In a total of 196 patients with early stage R-positive, HER-2 negative breast cancer (pT1-3, pN0-N1mic), Oncotype DX RS comprising 16 cancer gene and 5 reference gene expressions in formalin-fixed paraffin-embedded tumor tissues was classified according to TAILOR x risk category and retrospectively compared with its clinicopathological properties.

Results: the Oncotype DX RS was ≥11 in 81.6% of patients (160 patients), <11 in 18.3% of patients (36 patients). Of the patients, 48.5% had Luminal A, 51.5% had Luminal B subtype. Of the patients with low recurrence score (<11), 75% (27 patients) were Luminal A, 25% (9 patients) were Luminal B molecular subtype. Univariate analysis showed that there was a significant correlation between young age (<50 years), low progesteron receptor (PR) immunoreactivity (≤20%), high Ki-67 (≥14) values and high RS (≥11) (p=0.011, p=0.002, ve p=0.005), whereas multivariate analysis showed that high RS (≥11) was correlated with young age and low PR value (p=0.001, p=0.001).

Conclusion: According to the TAILOR x risk category, a significant relationship was found between an RS value greater than or equal to 11 and low PR immunoreactivity (≤%20) and young age (<50 years). Certain clinicopathological parameters such as these may be supportive, although not sufficient on their own, in determining the treatment decision when Oncotype DX test is unavailable.

Keywords: Early stage breast cancer, clinicopathological features, Oncotype DX Recurrens Score, TAILOR x risk category.

SSB-35

The role of neutrophil lymphocyte ratio in predicting the survival of recurrent glioblastoma multiforme patients treated with the combination of bevacizumab and irinotecan

Oktay Bozkurt, Mevlüde İnanç

Department of Medical Oncology, Erciyes University Faculty of Medicine, Kayseri

Objective: The present findings support the correlation between systemic inflammation and cancer development and progression. Neutrophil lymphocyte ratio (NLR) is used as a simple indicator of systemic inflammation in some tumors. The aim of this study is to investigate the correlation between pre-

treatment NLR and progression-free survival (PFS) and overall survival (OS) in recurrent glioblastoma multiforme patients treated with bevacizumab and irinotecan.

Methods: A total of 30 patients with recurrent glioblastoma multiforme, who were treated with bevacizumab and irinotecan between June 2012 and January 2018 were evaluated retrospectively. NLR was determined by dividing absolute neutrophil count by absolute lymphocyte count. ROC analysis was used to determine the threshold value for NLR. The threshold value for NLR was 2.1 (Figures 1 and 2). Patients were divided into two groups as NLR ≤2.1 and NLR >2.1.

Results: Median age was 51 (range 27-63). Of the 30 patients, 15 (50%) were female and 15 (50%) were male. The median PFS was 9 months (95% CI 3.93 9514.0) in patients with NLR ≥2.1 and 4 months (95% CI 2.91-5.08) in patients with NLR <2.1 (p=0.042) (Figure 3). The median OS was 28 months in the group with NLR ≥2.1 (95% CI 6.84-49.1), while it was 20 months in the group with NLR <2.1 (95% CI 11.7-28.2) (p=0.026) (Figure 4).

Conclusion: In our study, patients with increased NLR values before the treatment had shorter PFS and OS values. We conclude that the neutrophil / lymphocyte ratio can be used as a useful biomarker for this group of patients. However, larger, prospective studies are needed to confirm whether there is a predictive value of NLR in recurrent glioblastoma multiforme patients.

Keywords: Glioblastoma, bevacizumab, irinotecan, neutrophil-lymphocyte ratio

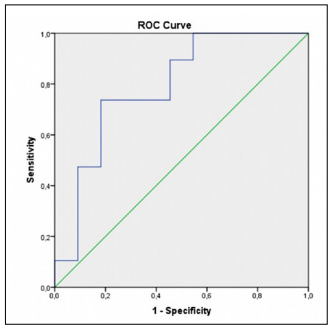


Figure 1. The predictive value of NLR for progression-free survival (sensitivity 89.5% and specificity 54.5%, area under the ROC curve = 0.789), p=0.009.

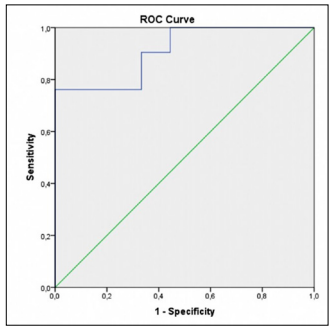


Figure 2. The predictive value of NLR for overall survival (sensitivity 90.5% and specificity 44.4%, area under the ROC curve = 0.910), p<0.001.

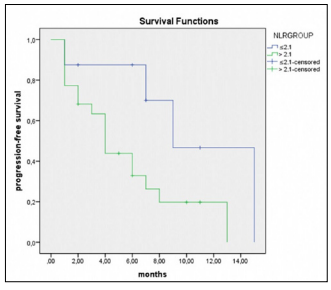


Figure 3. Progression-free survival with respect to neutrophil/lymphocyte ratio in recurrent glioblastoma multiforme patients receiving combined therapy with bevacizumab and irinotecan (p=0.007).

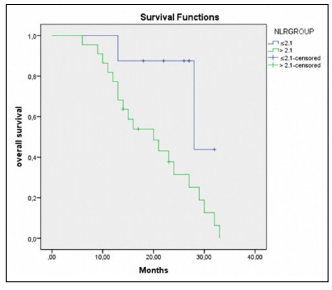


Figure 4. Overall survival with respect to neutrophil / lymphocyte ratio in recurrent glioblastoma multiforme patients receiving combined therapy with bevacizumab and irinotecan (p=0.021).

SSB-36

Prognostic Value of NLR and CA19-9 in Predicting Survival in Patients with Metastatic Pancreatic Cancer

İsa Dede,[1] Şirin Çetin[2]

[1]Mustafa Kemal University, Hatay; [2]Ondokuz Mayis University, Samsun

Objective: The predictive importance of different prognostic biomarkers has been studied in various types of cancer. The aim of our study was to determine the risk level and prognostic significance of neutrophil to lymphocyte ratio (NLR) and CA19-9 values in patients with metastatic pancreatic cancer and show its correlation with survival.

Methods: In our study, clinical and laboratory data of 118 metastatic pancreatic cancer patients at the time of diagnosis were analyzed retrospectively. The overall survival time was calculated by Kaplan-Meier method. Cox regression analysis was performed to determine the prognostic factors affecting pancreatic cancer.

Conclusion: The mean age of the patients was 67±9.57 years. The overall median survival of the patients during the follow-up was 12 months (95% CI 9.73-14.26). According to ROC curve analysis, NLR cut-off value was 3.54 ([AUC]: 0.653, 95%CI [0.56 to 0.73], p=0.006) and CA19-9 cut-off value was 437 ([AUC]: 0.670, 95%CI [0.57 to 0.75], p=0.002). A statistically significant difference was found between CA19-9 (p<000.1) and NLR (p<000.1) and overall survival. According to multivariate Cox regression analysis; NLR (≥3.54 vs <3.54 HR=2.17, 95% CI 1.17-4.03, p=0.013) and CA19-9 (≥437 vs <437, HR=1.81, 95% CI 1.08-3.03 p=0.022), were identified as important prognostic factors in overall survival (OS) analysis.

Discussion: In our study, pre-treatment NLR and CA19-9 were found to be reliable predictive markers for poor prognosis in patients with metastatic PC. According to the results of our study, NLR and CA19-9 can be used to predict survival in patients with pancreatic cancer. We believe that our findings will shed light on the management of treatment protocols for patients with metastatic pancreatic cancer.

Keywords: Metastatic pancreatic cancer, NLR, CA19-9, prognostic factor

SSB-37

Comparison of Different Rates of PD-L1 Expression with Clinicopathological Findings in Non-Small Cell Lung Carcinoma Patients

Atike Gökçen Demiray,[1] Serkan Değirmencioğlu,[1] Umut Çakıroğlu,[1] Nail Özhan,[1] Gamze Gököz Doğu,[1] Arzu Yaren,[1] Ferda Bir[2]

[1]Department of Medical Oncology, Pamukkale University Faculty of Medicine, Denizli; [2]Department of Medical Pathology, Pamukkale University Faculty of Medicine, Denizli

Objective: The most suitable patients for immunotherapy are determined by IHC detection of PD-L1. The patients with PDL1 expression were shown to benefit significantly from immunotherapies. Our aim is to investigate the correlation between PD-L1 expression in NSCLC with clinicopathological findings.

Method: Parrafin blocks of 15 NSCLC patients were analyzed in our pathology department. The samples were stained with Ventana SP263 antibody. Data were taken from the patient files.

Results: The mean age was 58. 13 of the patients were male and 2 were female. Only 1 patient never smoked, 14 patients were ex-smokers and the mean cigarette use was 60 packages / year. There were six adenocarcinoma, 8 squamous and 1 adenosquamous cancers. At the time of diagnosis, 2 patients were stage 1, 7 were stage 3, and 6 were stage 4. Six patients were operated and PDL-1 analysis was made using the material obtained during the operation except one patient. PDL-1 analysis of 9 patients was made using the biopsy sample at the time of diagnosis. 12 (80%) patients were (+). PD-L1 rates were different.1-3-5-20-30-40-60-70-95%).Three patients had EGFR mutation, and 2 of these patients had PDL-1 (-), 1 was 3% (+). All patients had ALK and ROS-1 (-). PD-L1 positivity of the operation materials were 30-60-70 and 95%. ERCC1 expression was (+) in 7 patients and the PD-L1 was also (+) in these patients. A PD-L1 (+) of 60% was considered high and median PFS in these patients was 31.5±7.2 weeks, whereas this was 46.6±17.1 in those with low PD-L1, and total median PFS was 41.3±11.2. Median overall survival was 178.3±7.3 weeks in those with high PD-L1, whereas this was 74.3±21.6 in those with low PD-L1, and median total survival is 103.78±20.7 weeks. There is no significant difference in PFS and OS. There is no correlation with other factors.The overall survival rate of 2 patients with high PD-L1 (both 60%) who took Nivolumab in the 3rd line were 164 and 183 weeks, respectively. In conclusion, it is known that evaluation of PDL-1 with IHC is an immportant predictive biomarker in the treatment of checkpoint inhibitors. However, in NSCLC, there is complex immunity; studies show that PDL-1 +/- alone may not be sufficient as a biomarker.

Keywords: Non-small cell lung carcinoma, PD-L1, immunotherapy

SSB-38

3rd Step in the Treatment of Metastatic Colorectal Cancer: Regorafenib vs Re-Chemotherapy

Osman Köstek,[1] Muhammet Bekir Hacıoğlu,[2] Abdullah Sakin,[3] Tarık Demir,[4] Murat Sarı,[5] Ozlem Ozkul,[6] Murat Araz,[7] Nazım Can Demircan[1]

[1]Trakya University Faculty of Medicine, Edirne; [2]Konya Training and Research Hospital, Konya; [3]Okmeydanı Training and Research Hospital, İstanbul; [4]Bezmi Alem University, Istanbul; [5]Istanbul University, Istanbul; [6]Sakarya University, Sakarya; [7]Afyon Kocatepe University, Afyon

Introduction: We aimed to compare the efficacy of regorafenib and re-chemotherapy (RCT) after progression in the 3rd series, in patients with metastatic colorectal cancer who received chemotherapy in the first two series.

Materials and Methods: There were 31 patients in the Regorafenib group and 73 patients in the RCT group. In subgroup analysis, if response to treatment was observed in the radiological evaluation at the end of 1st and 2nd series, it was classified as A; if there was response to either one of the series, it was classified as B; if there was no response to any of the series, it was classified as C. Overall survival and progression-free survival durations of the groups were recorded.

Results: While the rate of disease control was 85.6% in the 1st series, in the 2nd series, it was 69.2%. In the 3rd series, RCT (58.1%) was significantly higher than the regorafenib (37.0%) (p=0.04). Overall survival was significantly better in the third series in the RCT (HR 0.29 95% CI 0.16-0.54, p<0.001).The median survival was 12 months in RCT (95% CI 8.1-15.9), whereas it was 6 months in the regorafenib group (95% CI 6.0-7.3) (p<0.001). Similarly, PFS was higher in the RCT group (HR 0.22 95% CI 0.11-0.43, p<0.001). While it was 9.16 months in the RCT group, (95% CI 7.15-11.18), it was 3.41 months in the regorafenib group (95% CI 3.01-3.82) (p<0.001). In the subgroup analysis, it was found that OS and PFS in the RCT was better than regorafenib, whereas group C comprised regorafenib patients alone (Table 1).

Discussion: After the use of standard chemotherapy regimens in the first two series, treatment options for the 3rd series are still not completely clear. If the chemotherapy sensitivity of the tumor persists, it is up to the clinician to choose which option to use. In our study, we found that in patients which disease control is achieved in at least one of the first two steps, RCT was still a valuable option against regorafenib.

Keywords: Regorafenib, re-chemotherapy, overall survival, progression-free survival

Table 1. OS and PFS between the groups

	Overall Survival	Progression-Free Survival
Group A, Median (95% CI)	10.4 (6.9-13.8)	6.21 (2.87-9.54)
All	7.3 (6.7-7.8)	3.54 (2.42-4.67)
Regorafenib	18.6 (7.2-29.9)	9.82 (6.58-13.10)
Rechallenge		0.001
P value	<0.001	
Group B, Median (95% CI)	6.4 (5.1-7.8)	3.81 (3.11-4.51)
All	5.2 (4.3 - 6.1)	3.41 (2.19-4.64)
Regorafenib	8.3 (3.3-13.4)	6.81 (6.20-7.39)
Rechallenge	0.04	<0.001
P value		
Group C, months (95%CI) Overall / Regorafenib	5.6 (2.7-8.5)	2.99 (1.85-4.13)

SSB-39

Effectiveness of Vandetanib Treatment in Medullary Thyroid Cancer: Single Center Experience

Kadir Eser,[1] Emel Sezer,[1] Vehbi Erçolak,[1] Kerem Sezer,[2] Çağlar Çıtak[3]

[1]Department of Internal Medicine and Medical Oncology, Mersin University Faculty of Medicine, Mersin; [2]Department of Internal Medicine and Endocrinology, Mersin University Faculty of Medicine, Mersin; [3]Department of Pediatric Oncology, Mersin University, Faculty of Medicine, Mersin

Introduction: Medullary thyroid carcinoma (MTC) is a rare cancer caused by parafollicular C cells secreting thyroid calcitonin. Vandetanib is an effective treatment option in metastatic thyroid cancers. Since it is not approved for the 1st line treatment in our country, it can be prescribed in the 2nd line upon off-label application.

Materials and Methods: In our study, 7 patients with stage 4 medullary thyroid cancer under Vandetanib treatment, who were followed-up between 2006 and 2018 were evaluated in the Medical Oncology Department of Mersin University Faculty of Medicine. The median age of the patients was 47 (16-71) and 5 were female (71%). Total thyroidectomy was performed except for 2 patients.

Results: The most common metastasis site was lung (n=4, 57%), mediastinum (n=4, 57%), liver (n=2, 28%), bone (n=2, 28%). Six patients (85%) received chemotherapy with platinum and taxane in the first-line treatment, and vandetanib treatment was given to 7 post-progression patients. The median PFS of patients using Vandetanib was 14 months and the median OS was 61.4 months. None of the patients had grade 3 or 4 toxicity, and there was no need to discontinue drugs due to toxicity. In one patient, treatment was discontinued due to progression, complete response was observed in one patient, partial response in 3 patients, and the disease was stabilized in 2 patients. Vandetanib is an effective option in metastatic medullary thyroid cancer. If side effects can be followed up carefully, it can be safely administered.

SSB-40

Prognostic Significance of Hemogram-Related Inflammatory Markers in Metastatic Colon Cancer

Muhammet Bekir Hacıoğlu,[1] Süleyman Şahin[2]

[1]Department of Medical Oncology, Konya Training and Research Hospital, Konya; [2]Department of Medical Oncology, Van Training and Research Hospital, Van

Aim: The aim of this study is to investigate the relationship between neutrophile / lymphocyte ratio (NLR), platelet / lymphocyte ratio (PLR), and mean platelet volume (MPV), which are inflammatory markers, with prognosis and RAS mutation in metastatic colorectal cancer (mCRC).

Method: 61 patients diagnosed with mCRC are included in the study. Patients are divided into two groups as wild type and mutant type, according to RAS mutation. The NLR, PLR and MPV at the time of diagnosis are obtained retrospectively from the patient files. Kaplan Meier test is used for survival analysis and Cox-regression analysis is used to examine the independent factors that affect survival.

Results: Of the 61 patients, 25 are female and 35 are male, and the median age was 59 years. Thirty six patients are wild type RAS, and 25 are mutant RAS. The tumor is located in the right colon in 11 cases and in the left colon in 49 cases. There is no statistically significant relationship between NLR, PLR and MPV and progression-free survival (PFS). In the overall survival (OS) analysis, when 3.22 was set as the threshold value of NLR and 189.8 is set as the threshold value of PLR (based on median), both are not correlated with the OS in the general group (p=0.21 and p=0.43), whereas in the RAS-mutant group, NLR >3.22 and PLR >189.8 are correlated with short OS [(45 vs. 19 months, p=0.004) and (53 vs.21 months, p=0.003)]. Cox-regression analysis of the factors negatively affecting the OS are; NLR >3.22 (HR, 3.87; 95% CI: 1.40-8.67, p=0.006), PLR >189.7 (HR, 3.39; 95%CI: 1.40-8.1.6, p=0.007) and tumor localized at the right (HR, 3.89; 95%CI: 1.24-12.18, p=0.019), whereas metastasectomy (HR, 0.35; 95%CI: 0.14-0.84, p=0.020) and radio frequency ablation (HR, 0.39, 95% CI: 0.004-0.388, p=0.006) are the positive factors; and the importance of MPV could not be shown.

Conclusion: High NLR and PLR in RAS-mutant mCRC patients are shown to be markers associated with shorter OS. The disadvantage of our study is that it was retrospective and the groups did not receive standard treatments. To determine the importance of our findings in clinical practice, prospective studies with more patients are needed.

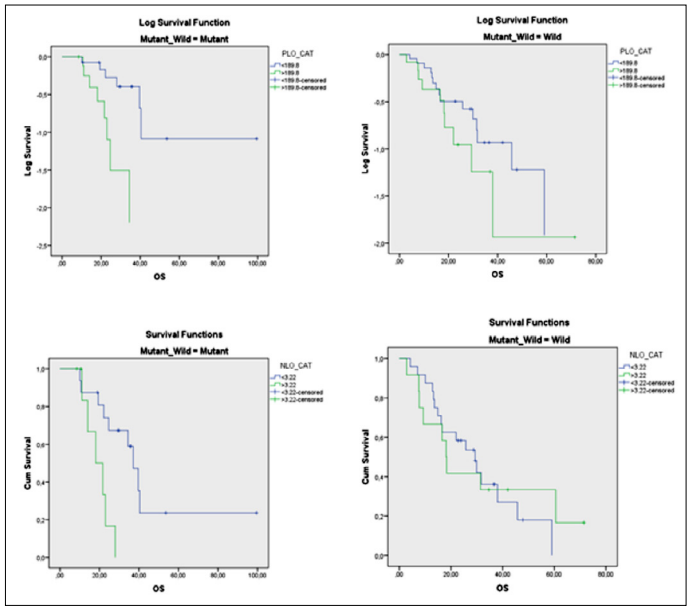


Figure 1.

2. ULUSAL İMMÜNOTERAPİ VE ONKOLOJİ KONGRESİ YAZAR DİZİNİ