

DOI: 10.14744/ejmo.2017.43153 EJMO 2017;1(1):38-40

**Case Report** 



# Combination of Docetaxel and Gemcitabine Ineffective in Metastatic Eccrine Porocarcinoma: A Case Report

# Hilmi Kodaz,<sup>1</sup> Muhammet Bekir Hacioglu,<sup>2</sup> Osman Kostek,<sup>2</sup> Bulent Erdogan,<sup>2</sup> Ebru Tastekin,<sup>3</sup> Cagnur Elpen Kodaz,<sup>4</sup> Irfan Cicin<sup>2</sup>

<sup>1</sup>Department of Medical Oncology, Acibadem Eskisehir Hospital, Eskisehir, Turkey <sup>2</sup>Department of Medical Oncology, Trakya University Faculty of Medicine, Edirne, Turkey <sup>3</sup>Department of Pathology, Trakya University Faculty of Medicine, Edirne, Turkey <sup>4</sup>Department of Health, Acibadem Eskisehir Hospital, Eskisehir, Turkey

## Abstract

Malignant eccrine porocarcinoma is a very rare tumor and the etiology is not known. Treatment is surgical removal of the tumor. The benefit of chemotherapy and radiotherapy is unclear. A 49-year-old male patient presented with the complaint of left inguinal swelling. Ultrasonography examination revealed 5x4 cm inguinal lymphadenopathy. The inguinal lymph nodes were excised. Pathology report indicated eccrine porocarcinoma. The patient was treated with cisplatin 40 mg/m<sup>2</sup> week as well as concurrent radiotherapy for 5 weeks. After 6 weeks of dual therapy, liver metastases were detected. KRAS, NRAS, and BRAF tests were negative. Gemcitabine was administered at a dose of 1000 mg/m<sup>2</sup> on days 1 and 8 every 21 days, and docetaxel was administered at a dose of 75 mg/m<sup>2</sup> on day 8, every 21 days. There was progression after 2 cycles of chemotherapy. The patient lived 7 months. In this case, use of synchronous cisplatin and radiotherapy as adjuvant treatment could not prevent tumor metastasis. The combination chemotherapy of docetaxel and gemcitabine applied after metastatic disease development was ineffective.

**Keywords:** Adjuvant cisplatin, BRAF, docetaxel, eccrine porocarcinoma, gemcitabine, KRAS, NRAS **Cite This Article:** Kodaz H, Hacioglu M, Kostek O, Erdogan B, Tastekin E, Elpen Kodaz C, Cicin I. Combination of Docetaxel and Gemcitabine Ineffective in Metastatic Eccrine Porocarcinoma: A Case Report. EJMO. 2017; 1(1): 38-40

Malignant eccrine porocarcinoma is a very rare tumor that develops in the intraepithelial ductal region of the eccrine sweat glands.<sup>[1-3]</sup> The first case of eccrine porocarcinoma was reported in 1963.<sup>[4]</sup> The etiology of eccrine porocarcinoma is not known.<sup>[5]</sup> The most frequent tumor localization is in the lower extremities, abdomen, or scalp. <sup>[6]</sup> The basic treatment of eccrine porocarcinoma is surgical removal of the tumor.<sup>[7, 8]</sup> The benefits of chemotherapy and radiotherapy are ambiguous.<sup>[6]</sup>

# **Case Report**

A 49-year-old male patient presented with the complaint of left inguinal swelling. Inguinal lymphadenopathy of 5x4 cm was detected on ultrasonography examination. Fine needle aspiration biopsy sample of lymph node was reported as malignant. F-18 fluorodeoxyglucose (FDG) uptake in the left inguinal mass (standardized uptake value [SUV] maximum 8:18) was observed on positron emission tomography/computed tomography (PET/CT) image (Figure 1).

Address for correspondence: Hilmi Kodaz, MD. Acibadem Eskisehir Hastanesi, Tibbi Onkoloji Klinigi, Eskisehir, Turkey Phone: +90 507 931 42 86 E-mail: hilmikodaz@hotmail.com

Submitted Date: May 22, 2017 Accepted Date: July 04, 2017 Available Online Date: July 26, 2017 <sup>®</sup>Copyright 2017 by Eurasian Journal of Medicine and Oncology - Available online at www.ejmo.org



Figure 1. Positron emission tomography/computed tomography.

The inguinal lymph nodes were excised. Pathology result indicated porocarcinoma with Ki 67 proliferation index of 90% (Figure 2).

The patient was treated with cisplatin 40 mg/m<sup>2</sup> weekly as well as radiotherapy for 5 weeks. After 6 weeks of simultaneous chemo-radiotherapy, FDG uptake (SUV max 16.11) was detected in largest mass (6 cm) in the liver on PET/CT image (Figure 3).

KRAS, NRAS, and BRAF tests were conducted on the primary tumor for possible targeted treatment. All 3 tests had negative result. Gemcitabine was administered at a dose of 1000 mg/m<sup>2</sup> on days 1 and 8, every 21 days, and docetaxel was given at a dose of 75 mg/m<sup>2</sup> on day 8, 21 every days. Progression was detected after 2 cycles of chemotherapy. The patient lived for 7 months; metastasis developed at the fifth month after diagnosis, and the patient died 2 months after the development of metastasis.

There is no proven effective standard therapy for eccrine porocarcinoma. It has been reported that use of methotrexate or docetaxel as a single agent can be effective in the control of the disease.<sup>[9-11]</sup>

Pathological prognostic indicators of poor outcome include high mitotic index, lymphovascular invasion, and tumor size.<sup>[12]</sup> In the present case, the Ki-67 proliferation index was 90%. The KRAS, NRAS, and BRAF tests for targeted treatment were negative.

In this case, synchronous application of cisplatin and radiotherapy as adjuvant treatment could not prevent tumor metastasis and combination chemotherapy of docetaxel and gemcitabine administered after metastatic disease development was ineffective. Targeted therapies and genetic studies of this disease are needed.



**Figure 2.** Malignant epithelial cells in lobular islands with cystic cavities and extensive necrosis in center (arrow) (Hematoxylin and eosin x50).



Figure 3. Positron emission tomography/computed tomography.

#### Disclosures

Peer-review: Externally peer-reviewed. Conflict of Interest: None declared.

### References

- Sean RC, David JL. Cancer of the Skin. In: Devita VT, Hellman S and Rosenberg SA editors. Cancer: Principles and practice of oncology. 10<sup>th</sup> ed. Philadelphia, Pennsylvania: Lippincott-Raven;2015: p. 1332–4.
- 2. Cazeau C, Lepreux S, Taieb A, Delaunay M, Jouary T. Eccrine porocarcinoma: a highly malignant tumor with a poor prognosis. Ann Dermatol Venereol 2008;135:722–4. [CrossRef]
- Arbona E, Balme B. Eccrine poroma and porocarcinoma. Ann Dermatol Venereol 2010;137:660–2. [CrossRef]
- 4. Pinkus H, Mehregan AH. Epidermotropic eccrine carcinoma. A

case combining features of eccrine poroma and Paget's dermatosis. Arch Dermatol 1963;88:597–606. [CrossRef]

- 5. Wick MR, Goellner JR, Wolfe JT 3<sup>rd</sup>, Su WP. Adnexal carcinomas of the skin. I. Eccrine carcinomas. Cancer 1985;56:1147–62.
- 6. Huet P, Dandurand M, Pignodel C, Guillot B. Metastasizing eccrine porocarcinoma: report of a case and review of the literature. J Am Acad Dermatol 1996;35:860–4. [CrossRef]
- Pernia LR, Guzman-Stein G, Miller HL. Surgical treatment of an aggressive metastasized eccrine poroma. Ann Plast Surg 1993;30:257–9. [CrossRef]
- Marone U, Caracò C, Anniciello AM, Di Monta G, Chiofalo MG, Di Cecilia ML, et al. Metastatic eccrine porocarcinoma: report of a case and review of the literature. World J Surg Oncol 2011;9:32. [CrossRef]
- 9. Plunkett TA, Hanby AM, Miles DW, Rubens RD. Metastatic ec-

crine porocarcinoma: response to docetaxel (Taxotere) chemotherapy. Ann Oncol 2001;12:411–4. [CrossRef]

- Morris DM, Sanusi ID, Lanehart WH. Carcinoma of eccrine sweat gland: experience with chemotherapy, autopsy findings in a patient with metastatic eccrine carcinoma, and a review of the literature. J Surg Oncol 1986;31:26–30. [CrossRef]
- Aaribi I, Mohtaram A, Ben Ameur El Youbi M, Kharmoum J, El Kabous M, Mrabti H, et al. Successful management of metastatic eccrine porocarcinoma. Case Rep Oncol Med 2013;2013:282536. [CrossRef]
- Robson A, Greene J, Ansari N, Kim B, Seed PT, McKee PH, et al. Eccrine porocarcinoma (malignant eccrine poroma): a clinicopathologic study of 69 cases. Am J Surg Pathol 2001;25:710– 20. [CrossRef]