EJMO

DOI: 10.14744/ejmo.2019.36883
EJMO 2019;3(3):224-226

Case Report

Primary Mucinous Carcinoma of Lower Eyelid: A Case Report

Alper Geyik, Cenk Demirdover, Fatih Alp Ozturk, Hasip Samil Yazgan, Selin Guler, Suleyman Cakmak

Department of Plastic, Reconstructive and Aesthetic Surgery, Dokuz Eylul University Hospital, Izmir, Turkey

Abstract

Primary mucinous carcinoma is a rare tumor which behaves in a relatively benign or locally aggressive manner and usually arises on the head and neck region. In this study, we would like to present a patient who has primary mucinous carcinoma of the skin, review the literature on this tumor. 63 years old male patient applied to our clinic with a palpable and painless mass at lower eyelid. Physical examination showed that it had irregular borders and 2.5x2 cm diameter. The incisional biopsy revealed mucinous carcinoma. According to statistics the primary mucinous tumor of skin would be counted as a rare entity. Therefore, it is hard to understand and define this kind of tumors. The diagnosis and treatment modalities could be varied among clinics. Primary mucinous carcinoma is a rare tumor. Therefore we would like to present our patient that we operated and share our experience with literature.

Keywords: Carcinoma, rare tumors

Cite This Article: *Geyik A, Demirdöver C, Öztürk FA, Yazgan HŞ, Güler S, Çakmak S. Primary Mucinous Carcinoma of Lower Eyelid: A Case Report. EJMO 2019;3(3):224-227.*

Primary mucinous carcinoma (PMC) is a rare tumor which behaves in a relatively benign or locally aggressive manner and usually arises on the head and neck region. There are more than 200 cases described in the literature and 30% were in the periorbital region.[1, 3] Although its differentiation is still controversial, this tumor has both eccrine and apocrine differentiation.[4, 5] Usually, it is described as a slow growing, erythematous asymptomatic nodular lesion.[3] Although these lesions are unremarkable to patients due to indolent nature, it has high recurrence rates and low metastasis risk.[1]

In this study we would like to present a patient who has primary mucinous carcinoma of the skin, review the literature on this tumor and compare our result with others.

Case Report

63 years old male patient applied to our clinic with a palpable and painless mass at lower eyelid. He had diabetes and hypertension as comorbid diseases and a history of myocardial infarction. The mass had been there for six months and slowly growing. Physical examination showed that it had irregular borders and 2.5x2 cm diameter. There wasn't diplopia, ocular movements and facial nerve functions were normal. Palpable lymphadenopathy wasn't found at preauricular, postauricular, submandibular and cervical regions. Diagnostic evaluation was performed with a CT scan. At the same time, incisional biopsy date was scheduled. The biopsy revealed mucinous carcinoma. Immediately, surgery was performed with a two centime-

Address for correspondence: Alper Geyik, MD. Dokuz Eylul Universitesi Hastanesi, Plastik, Rekonstruktif ve Estetik Cerrahi Anabilim Dali, Izmir, Turkey

Phone: +90 538 702 98 98 **E-mail:** alp_er027@hotmail.com

Submitted Date: August 27, 2018 **Accepted Date:** September 06, 2018 **Available Online Date:** August 02, 2019

ters safety margin (Figs.1, 2). During the operation, multiple samples were taken from different regions for the frozen section. After pathologists had confirmed that frozen materials were clear, temporoparietal fascia flap and reverse temporalis muscle flap was elevated to reconstruct the soft tissue defect (Fig. 3). Also, a composite graft was taken from the postauricular region for lower eyelid reconstruction. Finally, a full-thickness skin graft was harvested to close the skin defect (Fig. 4). Tie-over dressing was used to cover the graft. Flap and graft donor sites were sutured.

Figure 1. Preoperative view.

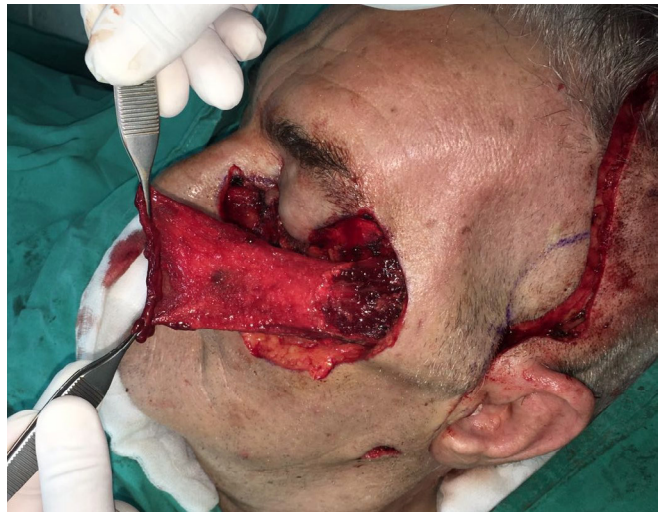

Figure 3. Reverse temporal muscle flap for reconstruction.

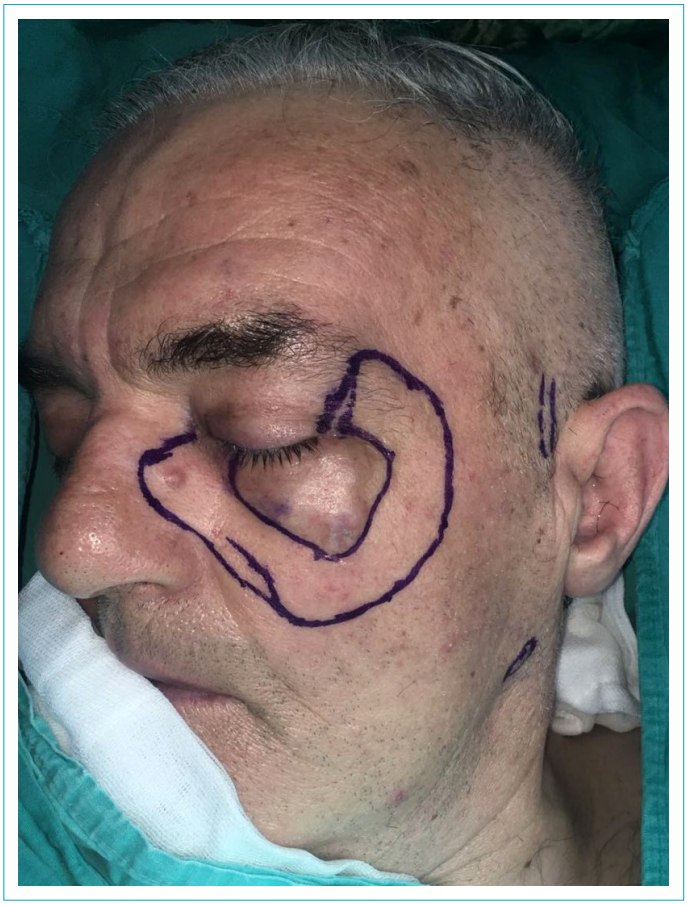

Figure 2. Intraoperative markings with 2 cm safe margin.

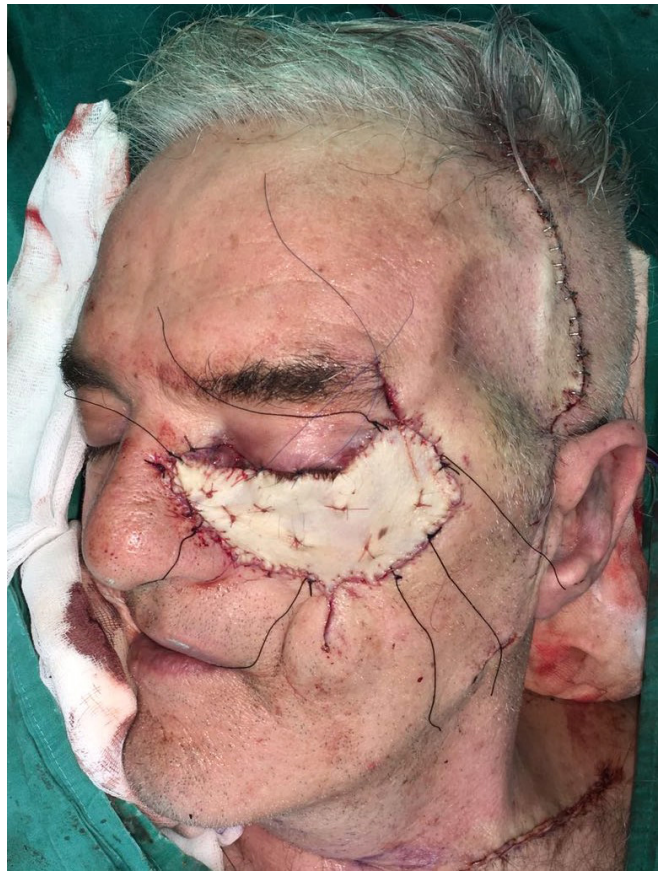

Figure 4. Full thickness skin graft on temporalis muscle flap.

Discussion

Different definitions of rare disease exist. The low prevalence accepted as <0.05% in Europe and in the USA, it is defined as a disease which affects less than 200.000 people.[6, 7] According to statistics, the primary mucinous tumor of skin would be counted as a rare entity. Therefore, it is hard to understand and define this kind of tumors. The diagnosis and treatment modalities could be varied among clinics.

The patient's gender and age were similar to the literature. According to a recent meta-analysis, there was a slightly male predominance and the mean age was 63.5±13.23. However there were other studies that found different gender distribution in small case series.[8] Also slow growing, a painless solitary nodular pattern was matching the definition of this kind of tumor exactly. Still, we must consider epidermoid and sebaceous cyst, lipoma, myxoma, basal cell and squamous cell carcinoma as the differential diagnosis. Periorbital region is the most common anatomic localization and has a better prognosis than other regions3. The tumor could be either unilateral or bilateral. When this tumor arises in the eyelid, it is usually a unilateral lesion8. This finding is also similar to our case. There weren't any color changes on the skin surface. Unlike, other case reports the diameter of the tumor was bigger in our study. Zhang et al.[8] measured lesions diameter from 3x2 to 8x5 mm. Snow et al.[9] also measured the diameter of approximately 8 mm. That could be because of the patient's late referral to our clinic. In our study tumor infiltrated all the lower eyelid from the lateral canthus to the caruncle but position and movement of eyelid hadn't been disrupted. CT scan didn't determine any metastasis as expected.

Clinical and surgical information about the patient was given to the dermopathology unit. Hematoxylin and eosin and periodic acid-Schiff stained parts were examined. Immunohistochemical stains cytokeratin 7 (CK7) and cytokeratin 20 (CK20) were used. These stains were important for the differentiation of mucinous carcinoma from other metastatic tumors1. Excisional biopsy result was reported as the tumor which was located in the dermis, containing mucin lakes with cribriform structures. This result was similar to the incisional biopsy.

Mohs microsurgery and frozen section control could be both performed for mucinous carcinoma. Because it has high recurrence rates and clean surgical margin must be obtained. We always prefer frozen section control. During surgery we put 2 cm surgical margin from the lesion and frozen was ended up negative so we preserved the globe and proceeded to the reconstruction stage. The surgical margin could be different according to clinics approach. But there isn't any consensus like melanoma or non-melanoma skin cancers. There is no evidence that a sentinel lymph node biopsy is indicated for patients with mucinous eccrine carcinoma of the eyelid.[8] Therefore we didn't perform sentinel lymph node biopsy. But we did total body CT scan and we didn't encounter any evidence of metastasis and we also checked whether the eyelid was primary tumor region or not. For the postoperative follow-up, we consulted the patient to medical and radiation oncology.

Conclusion

Primary mucinous carcinoma of the eyelid is a rare tumor. Therefore we would like to present our patient that we operated and share our experience with literature. Still, there is not enough study to set up a guideline about this tumor. When we continue to encounter this kind of tumors, literature will be enhanced.

Disclosures

Informed Consent: Written informed consent was obtained from the patient for the publication of the case report and the accompanying images.

Peer-review: Externally peer-reviewed.

Conflict of Interest: None declared.

References

1. Papalas JA, Praia AD. Primary mucinous carcinoma of the eyelid: a clinicopathologic and immunohistochemical study of 4 cases and an update on recurrence rates. Arch Ophthalmol 2010;128:1160–5. [CrossRef]
2. Breiting L, Dahlstrøm K, Christensen L, Winther JF, Breiting V. Primary mucinous carcinoma of the skin. Am J Dermatopathol 2007;29:595–6. [CrossRef]
3. Kamalpour L, Brindise RT, Nodzenski M, Bach DQ, Veledar E, Alam M. Primary cutaneous mucinous carcinoma: a systematic review and meta-analysis of outcomes after surgery. JAMA Dermatol 2014;150:380–4. [CrossRef]
4. Lennox B, Pearse AG, Richards HG. Mucin-secreting tumors of the skin with special reference to the so-called mixed-salivary tumor of the skin and its relation to hidradenoma. J Pathol Bacteriol 1952;64:865–80. [CrossRef]
5. Weedon D. Tumors of cutaneous appendages. In: Weedon D, ed. Weedon's Skin Pathology. 3rd ed. London, England: Churchill Livingstone Elsevier; 2010:790–1. [CrossRef]
6. Riou-Gotta MO, Fournier E, Danzon A, Pelletier F, Levang J, Mermet I, et al, Rare skin cancer: a population-based cancer registry descriptive study of 151 consecutive cases diagnosed between 1980 and 2004. Acta Oncol 2009;48:605–9. [CrossRef]
7. Dixon A. Rare skin cancers in general practice. Aust Fam Physician 2007;36:141–3. [CrossRef]
8. Zhang Q, Wojno TH, Fitch SD, Grossniklaus HE. Mucinous eccrine adenocarcinoma of the eyelid: report of 6 cases. Can J Ophthalmol 2010;45:76–8. [CrossRef]
9. Snow SN, Reizner GT. Mucinous eccrine carcinoma of the eyelid. Cancer 1992;70:2099–104. [CrossRef]