UC Davis Dermatology Online Journal

Title

Polymorphous low-grade adenocarcinoma in the upper lip: a well-described but infrequently recognized tumor.

Permalink

https://escholarship.org/uc/item/9q44b8bm

Journal

Dermatology Online Journal, 19(8)

Authors

Andreu-Barasoain, Marta Vicente-Martin, Javier Gomez de la Fuente, Enrique <u>et al.</u>

Publication Date

2013

DOI 10.5070/D3198019265

Copyright Information

Copyright 2013 by the author(s). This work is made available under the terms of a Creative Commons Attribution-NonCommercial-NoDerivatives License, available at https://creativecommons.org/licenses/by-nc-nd/4.0/

Peer reviewed

Volume 19 Number 8 August 2013

Case Presentation

Polymorphous low-grade adenocarcinoma in the upper lip: a well-described but infrequently recognized tumor.

Marta Andreu-Barasoain¹, MD, F Javier Vicente-Martín², MD, Enrique Gómez de la Fuente¹, MD, PhD, F Javier Salamanca-Santamaría³, MD, Ana Pampín-Franco¹, MD, Jose Luis López-Estebaranz¹, MD, PhD.

Dermatology Online Journal 19 (8): 8

¹Department of Dermatology. Hospital Universitario Fundación Alcorcón, Madrid, Spain, ²Department of Dermatology. Hospital Rey Juan Carlos, Móstoles, Madrid, Spain, ³Department of Pathology. Hospital Universitario Fundación Alcorcón, Madrid, Spain.

Correspondence:

Marta Andreu Barasoain Hospital Universitario Fundación Alcorcón. Calle Budapest 1, 28922, Alcorcón, Madrid, Spain. Telephone number: 0034639841282 E-mail: <u>martaandreub@gmail.com</u>

Abstract

Polymorphous low-grade adenocarcinoma (PLGA) is a rare malignant neoplasm arising almost exclusively in the minor salivary glands. PLGA occurs primarily in the oral cavity, especially in the palate, followed by the oral mucosa and upper lip [1,2]. Conditions involving these locations are often presented at dermatological clinics. Therefore, dermatologists should consider this entity in the differential diagnosis of the oral cavity tumors. We present a case of PLGA in the upper lip.

Case synopsis

A 75-year-old woman was referred to our department for a 3 year-history of a painless and slow-growing nodule in the upper lip. Physical examination revealed a firm nodular and well-circumscribed submucosal lesion, 2 cm in size, with an intact overlying mucosa (Figure 1). Excision of the lesion was performed. Histology showed a solid tumor, not encapsulated, consisting of a proliferation of epithelial cells distributed in different patterns (Figure 2), infiltrating the surrounding fat tissue. The cells were isomorphic and of small to intermediate size. Perineural invasion and mitoses were identified. A diagnosis of PLGA was made. A cervical CT and thorax radiography were normal. A wide local surgical excision and reconstruction with a semilunar advancement flap was performed. Two years after treatment, the patient is free of disease.



Figure 1. Nodular submucosal lesion in the upper lip.



Figure 2. Different histopathological patterns of the tumor (H&E x20). (a) Solid growth pattern. (b) Cribiform architectural arrangement of the tumor cells. (c) Lobular pattern with large solid nests. (d) Tubular and trabecular architecture.

Discussion

The term PLGA was introduced by Evans and Batsakis in 1984 to describe a malignant neoplasm of minor salivary gland origin [1]. Many of the larger series identify PLGA as the second or third most common malignancy of the minor salivary glands [2,3]. There appears to be a female preponderance and the age of presentation typically peaks in the sixth decade of life [4].

The typical presentation is that of an indolent submucosal lump, which may occasionally be painful or even ulcerated [4]. The clinical features will not distinguish PLGA from the other malignant intraoral minor salivary gland tumors and a biopsy is needed to confirm the diagnosis. Histologically, PLGA is characterized by a triad of infiltrative growth, multiple architectural growth patterns that include solid, trabecular, glandular, cribiform, fascicular, cordlike, and papillary (hence the term polymorphous) forms, and cytological uniformity. Because of its morphologic pleomorphism, PLGA has often been misdiagnosed as pleomorphic adenoma or adenoid cystic carcinoma. It is locally invasive and neurotropism is a characteristic feature [4].

Complete local excision with wide margins is the treatment of choice. Late recurrences after 5 years are reported in 9% to 26% of cases despite free surgical margins. Hence, long-term follow-up of at least 15 years is recommended. About 5% to 10% of tumors metastasize to cervical lymph nodes, but distant metastases are unusual. The role of radiotherapy and chemotherapy is not clear in the management of PLGA [4,5].

Since its description, several case series have described this entity, all of them in the oral medicine and surgery literature, with no documented cases in the dermatological journals. PLGA is not mentioned either in most of the dermatology text books. We believe the familiarity with this condition is important in the dermatology setting to facilitate prompt and proper diagnosis and adequate treatment of this well-defined but infrequently recognized disease.

REFERENCES

- 1. Evans HL, Batsakis JG. Polymorphous low-grade adenocarcinoma of minor salivary glands. A study of 14 cases of a distinctive neoplasm. Cancer. 1984 Feb;53(4):935-42. [PMID: 6692293]
- Buchner A, Merrell PW, Carpenter WM. Relative frequency of intra-oral minor salivary gland tumors: a study of 380 cases from northern California and comparison to reports from other parts of the world. J Oral Pathol Med. 2007 Apr;36(4):207-14. [PMID: 17391298]
- 3. Waldron CA, el-Mofty SK, Gnepp DR. Tumors of the intraoral minor salivary glands: a demographic and histologic study of 426 cases. Oral Surg Oral Med Oral Pathol. 1988 Sep;66(3):323-33. [PMID: 2845326]

- 4. Paleri V, Robinson M, Bradley P. Polymorphous low-grade adenocarcinoma of the head and neck. Curr Opin Otolaryngol Head Neck Surg. 2008 Apr;16(2):163-9. [PMID: 18327037]
- 5. Seethala RR, Johnson JT, Barnes EL, Myers EN. Polymorphous low-grade adenocarcinoma. Arch Otolaryngol Head Neck Surg. 2010 Apr;136(4):385-92. [PMID: 20403856]