

Journal of Diagnostics and Treatment of Oral and Maxillofacial Pathology 4(2018)186-189

DIAGNOSTICS & TREATMENT

Free online article at www.dtjournal.org

Case Report: Primary Mucosal Melanoma. An Extremely Rare Case in the Private Dental Practice*

Roman V. Feloniuk*

DDS; Private Dental Practice; Department of Maxillofacial Surgery, Khmelnytskyi Regional Hospital (place of work at moment of article preparing), Khmelnytskyi, Ukraine.

ABOUT ARTICLE

Article history:
Paper received 09 September 2018
Accepted 24 November 2018
Available online 25 December 2018

Keywords:
Mucosal melanoma
Oral mucosal melanoma
Classification of melanoma
Tumor-node-metastasis (TNM) staging
Post-operative radiotherapy
Adjuvant radiotherapy

SUMMARY

Mucosal melanoma (*synonyms*: oral melanoma, oral mucosal melanoma, and oral malignant melanoma) of the head and neck is a very rare and aggressive malignancy with a very poor prognosis [1,2]. A 56-year-old white gentleman was referred to the private dental clinic with a darkly pigmented lesion on upper alveolar ridge, upper lip mucosa, and hard palate. That paper describes: differential diagnostics, classification of oral melanomas [10, 11] that differs from cutaneous melanomas, tumornode-metastasis (TNM) staging of the oral mucosal melanoma [1, 2], and treatment options.

© 2018 OMF Publishing, LLC. This is an open access article under the CC BY licence (http://creativecommons.org/licenses/by-nc/4.0/).

Introduction

Mucosal melanoma (synonyms: oral melanoma, oral mucosal melanoma, and oral malignant melanoma) of the head and neck is a very rare and aggressive malignancy with a very poor prognosis (Breik et al, 2016; Ascierto et al, 2017) [1, 2]. In the maxillofacial area the melanoma can be finded in mandible (Cervenka et al, 2017), parotid glands (Pain et al, 1986; Tymofieiev, 2012), nasal mucosa and maxillary sinuses (Maldonado-Mendoza et al, 2015; Breik et al, 2016; Shin and Kim, 2017), etc. [1, 3-7]. Tseng et al (2011) noted that among head neck melanomas the face the is most frequently affected (48.1%) [8]. According to Chidzonga et al (2007), the primary oral mucosal malignant melanoma is representing from 0.2% to 8% of all melanomas [9]. The goal of this paper is to demonstrate clinical features of the POMM that involved upper alveolar ridge, upper lip mucosa, and hard palate.

Case Report

A 56-year-old white gentleman was referred to the private dental clinic with complaints for appearance of intraoral

11-E Zarichanska Street, Khmelnytskyi 29000, Ukraine

Phone: +380983342668

E-mail: feloniuk.clinic@gmail.com (Roman V. Feloniuk)

http://dx.doi.org/10.23999/j.dtomp.2018.4.7.

lesion (Fig 1) that had been present for three months and showed an extremely quick growth. Intraoral investigation showed a darkly pigmented lesion on upper alveolar ridge, upper lip mucosa, and hard palate. Similar to report of Magliocca *et al* (2006) the a patient of our clinic has no family history of melanoma [10]. After precise investigation of the lesion, medical history, and patients' complaints the patient was referred to the Head Neck Oncological Department, where the diagnosis of primary mucosal melanoma was proved after incisional biopsy.

Discussion

Magliocca *et al* (2006) strongly recommend that differential diagnosis should be made between different types of pigmented intraoral pathology such as [10]:

- 1) Drug disease or smoking associated melanosis;
- 2) Kaposi's sarcoma;
- 3) Oral melanotic macule;
- 4) Physiologic or racial pigmentation;
- 5) Melanocytic nevus;
- 6) Melanoacanthoma.

That case clearly confirms three predilections which were reported in the works of Barker *et al* (1997), Buchner *et al* (2004), and Magliocca *et al* (2006) [11, 12, 10]: *1)* Most cases of melanoma occur between the 4th and 7th decades of life, with a mean age at 55–57 years; *2)* A male predilection has been reported for oral mucosal melanoma; *3)* Oral mucosal melanoma demonstrates

^{*} This manuscript has not been presented

^{*} Corresponding author. Private Dental Practice "Feloniuk Clinic",







FIGURE 1. (**A-C**) Clinical appearance of pigmented lesion (*arrows*) on upper alveolar ridge, upper lip mucosa, and hard palate. (**C**) *Arrowhead* indicates an area of bleeding. Biopsy confirmed malignant melanoma.

a predilection for maxillary mucosa, with most cases appearing on keratinizing mucosa of the gingiva and palate. Discussing possibility to use the classification of cutaneous melanomas the 1995 WESTOP Banff Workshop and Magliocca *et al* (2006) noted that oral melanoma should be classified in different manner and included 4

types [10, 11], which are presented in Table 1.

Bakkal *et al* (2015) and Breik *et al* (2016) are clearly demonstrating (Table 2) the American Joint Committee on Cancer TNM (tumor–node–metastasis) staging system [13, 1] that should be used upon treatment of that types of malignancy. Also, Bakkal *et al* (2015) insist that

TABLE 1. Classification of Oral Melanomas [10, 11].

Oral Melanomas			
Atypical melanocytic proliferation	Melanoma-in-situ	Invasive melanoma	Combined in situ and invasive melanoma

TABLE 2. Tumor–Node–Metastasis (TNM) Staging of the Mucosal Melanoma of the Head and Neck [1, 2].

Primary Tumor	Regional Lymph Nodes	Metastasis
T3: mucosal disease	Nx: regional lymph nodes cannot be assessed	M0: no distant metastasis
T4a: moderately advanced disease–tumor involving deep soft tissue, cartilage, bone, or overlying skin	N0: no regional lymph node metastasis	M1: distant metastasis present
T4b: very advanced disease–involving brain, dura skull base, lower cranial nerves (IX, X, XI, XII), masticator space, carotid artery, prevertebral space, or mediastinal structures	*	

combination of radical surgical resection and adjuvant radiotherapy (RT) to be highly effective for local control [13]. The results of study Wushou *et al* (2015) suggest that post-operative radiotherapy (PORT) improves local-regional control but has no impact on overall status OS in head neck mucosal melanomas patients [14]. Lopez *et al* (2016) argued that complete surgical resection with clear margins is the mainstay of primary oral melanoma management and may provide the best results, although the therapeutic strategy should be tailored individually according to tumor stage, location, and previous treatments [15]. Despite of all types of treatment, prognosis is still very poor and stay at level of 5-20% (in a 5 year follow-up) from the moment of diagnosis.

Conclusions

All authors insisting that early detection of the melanoma, correct diagnosis according to the stage of that type of aggressive malignancy, and precise treatment can give the patient hope to get into the group of 5-20% of 5-year survival rate [10].

Acknowledgments

None.

Confirmation of patient's permission

Written patient consent was obtained for publishing the clinical photographs.

References

1. Breik O, Sim F, Wong T, Nastri A, Iseli TA, Wiesenfeld D.

- Survival outcomes of mucosal melanoma in the head and neck: case series and review of current treatment guidelines. *J Oral Maxillofac Surg* **2016**;74(9):1859–71. https://doi.org/10.1016/j.joms.2016.03.008.
- Ascierto PA, Accorona R, Botti G, Farina D, Fossati P, Gatta G, Gogas H, Lombardi D, Maroldi R, Nicolai P, Ravanelli M, Vanella V. Mucosal melanoma of the head and neck. Crit Rev Oncol Hematol 2017;112:136–52. https://doi.org/10.1016/j.critrevonc.2017.01.019.
- 3. Cervenka PD, Perez L Jr, Perez DE, Jones B. Melanoma Metastasis to the Mandible-Case Report and Comprehensive Literature Review. *J Oral Maxillofac Surg* **2017**;75(9):2025. e1-2025.e12. https://doi.org/10.1016/j.joms.2017.05.029.
- 4. Pain JA, Collier DSTJ, Conn PC. Malignant melanoma of a parotid lymph gland: An unusual case. *Int J Oral Maxillofac Surg* **1986**;15(5):645–7. https://doi.org/10.1016/S0300-9785(86)80073-4.
- Tymofieiev OO. Manual of maxillofacial and oral surgery [Russian]. 5th ed. Kyiv: Chervona Ruta-Turs; 2012.
- Maldonado-Mendoza J, Ramı'rez-Amador V, Anaya-Saavedra G, Irigoyen-Camacho ME, Ruíz-Godoy L, Ruíz-García E, Meneses-García A. Clinicopathological characterization of primary oral and sinonasal melanoma in a referral centre in Mexico City: 2000–2012. *Int J Oral Maxillofac Surg* 2015;44(4):427–32. https://doi.org/10.1016/j.ijom.2014.10.022.
- Shin SH, Kim SG. Malignant melanoma occurred in maxillary sinus: case report with review of literature. *Int J Oral Maxillofac Surg* 2017;46(S1):294. https://doi. org/10.1016/j.ijom.2017.02.989.
- 8. Tseng WH, Martinez SR. Tumor location predicts survival in cutaneous head and neck melanoma. *J Surg Res* **2011**;167:192–8.
- Chidzonga MM, Mahomva L, Marimo C, Makunike-Mutasa R. Primary malignant melanoma of the oral mucosa. *J Oral Maxillofac Surg* 2007;65(6):1117–20. https:// doi.org/10.1016/j.joms.2006.11.045.
- 10. Magliocca KR, Rand MK, Su LD, Helman JI. Melanoma-insitu of the oral cavity. *Oral Oncology Extra* **2006**;42(1):46–8.

PRIMARY MUCOSAL MELANOMA: EXTREMLY RARE CASE IN THE PRIVATE DENTAL PRACTICE

https://doi.org/10.1016/j.ooe.2005.08.009.

- 11. Barker BF, Carpenter WM, Daniels TE, Kahn MA, Leider AS, Lozada-Nur F, Lynch DP, Melrose R, Merrell P, Morton T, Peters E, Regezi JA, Richards SD, Rick GM, Rohrer MD, Slater L, Stewart JC, Tomich CE, Vickers RA, Wood NK, Young SK. Oral mucosal melanomas: the WESTOP Banff workshop proceedings. Western Society of Teachers of Oral Pathology. Oral Surg Oral Med Oral Pathol Oral Radiol Endod 1997;83(6):672–9.
- 12. Buchner A, Merrell PW, Carpenter WM. Relative frequency of solitary melanocytic lesions of the oral mucosa. *J Oral Pathol Med* **2004**;33(9):550–7.
- 13. Bakkal FK, Başman A, Kızıl Y, Ekinci Ö, Gümüşok M, Ekrem Zorlu M, Aydil U. Mucosal melanoma of the head and neck:

- recurrence characteristics and survival outcomes. *Oral Surg Oral Med Oral Pathol Oral Radiol* **2015**;120(5):575–80. https://doi.org/10.1016/j.oooo.2015.06.038.
- 14. Wushou A, Hou J, Zhao YJ, Miao XC. Postoperative adjuvant radiotherapy improves loco-regional recurrence of head and neck mucosal melanoma. *J Craniomaxillofac Surg* **2015**;43(4):553–8. https://doi.org/10.1016/j.jcms.2015.02.011.
- 15. López F, Rodrigo JP, Cardesa A, Triantafyllou A, Devaney KO, Mendenhall WM, Haigentz M Jr, Strojan P, Pellitteri PK, Bradford CR, Shaha AR, Hunt JL, de Bree R, Takes RP, Rinaldo A, Ferlito A. Update on primary head and neck mucosal melanoma. *Head Neck* **2016**;38(1):147–55. https://doi.org/10.1002/hed.23872.

Feloniuk RV.

Case report: primary mucosal melanoma. An extremely rare case in the private dental practice.

J Diagn Treat Oral Maxillofac Pathol 2018;2(4):186–9.

http://dx.doi.org/10.23999/j.dtomp.2018.4.7.