Case study

Metastasis in the small bowel from primary malignant melanoma of the palate: report of an unusual case

Abstract

Aims: The aim of this manuscript is to present a rare case of metastasis in the small bowel from primary malignant melanoma of the palate.

Case: We present the case of an 81-year-old male with a tumor of the small bowel, which proved to be metastatic melanoma of the palate.

Discussion: Melanocytes arise from the neural crest and migrate to the epidermis, meninges, uveal tract and ectodermal mucosa. A melanoma is a malignant tumor consisting of melanocytes. Oral melanomas are very rare, and metastasis to the small bowel is an infrequent presentation of this tumors. Eventually, the prognosis of these patients is poor.

Conclusion: Metastatic melanoma, even if it is rare, should be included in the differential diagnosis of any neoplasm of the small bowel.

Key words: Melanoma; palate; metastasis; small bowel

Introduction

Cutaneous and mucosal melanomas arise from malignant transformation of melanocytes. Mucosal melanoma (MM) is a rare form of melanoma, with poor prognosis, more often found in the upper aerodigestive tract, the genitourinary tract and the anorectal region. Approximately 25% of MM occurs in oral mucosa. Oral melanomas (OM) account for 0,2-8% of all melanomas and 0,4-1,3% of all malignant neoplasms. OM has a higher prevalence in Japanese, Indians of Asia and African-Americans, in males than females and in people above the age of 40 years[1]. Hard palate and maxillary gingiva are the most involved sites[2].

Exact etiology of primary OM is not known. Dental irritation, tobacco use, exposure to formaldehyde and alcohol appear to be among the risk factors. Symptoms usually

include a melanotic pigmentation, amelanotic lesions (20%), pain and bleeding. Common sites of metastasis are the lymph nodes, liver and lung, but other organs can be involved too[3]. Prognosis is poor because of the delayed diagnosis, the high rates of local relapse and distant metastasis due to early hematogenous spread[4].

Melanoma, cutaneous or mucosal, metastasizing to the small bowel, as in our case, is a rare presentation of the disease, causing signs and symptoms such as anemia and abdominal pain. It can be diagnosed with abdominal computed tomography (CT), capsule endoscopy and Positron emission tomography-CT (PET-CT). Treatment includes surgical resection of the metastasis, which has been shown to increase overall survival, and adjuvant immunotherapy[5].

Case Report

An 81-year-old male presented to the hospital complaining about abdominal pain for the past few months, weight loss, nausea and vomiting. Two months ago, he had been hospitalized because of anemia (Hct:18). There were no other remarkable elements from his past medical history. The patient had undergone colonoscopy and gastroscopy without any important findings. An abdominal CT was recommended. The CT showed swollen mesenteric lymph nodes and enlarged wall thickness of part of the jejunum, giving the impression of a tumor of the small bowel. Surgery was decided and resection of this part of the jejunum was performed. During intubation for the surgery, a blackish-grey bleeding discoloration of both the hard and soft palate was observed(figure 1). After surgery, tissue from this lesion of the palate was taken and sent for histologic investigation. During the post-operative course, the patient presented high fever because as it was proved, of contamination by S.aureus and E.faecalis. He also presented swelling of the neck. An FNA was performed and showed a pleomorphic adenoma of the parotid gland.

Two weeks after surgery, it was clear from the jejunum biopsy that the lesion was a melanoma. The tumor was positive for MelanA, HMB45, S-100, Vimentin and Ki67(high proliferation index). A recommendation was made for search of the primary site of the melanoma. A few days later, the results from the biopsy of the palate showed a high malignancy melanoma, also positive for MelanA, HMB45 and S-100.

Finally, the patient was referred to oncologic clinic for further treatment.

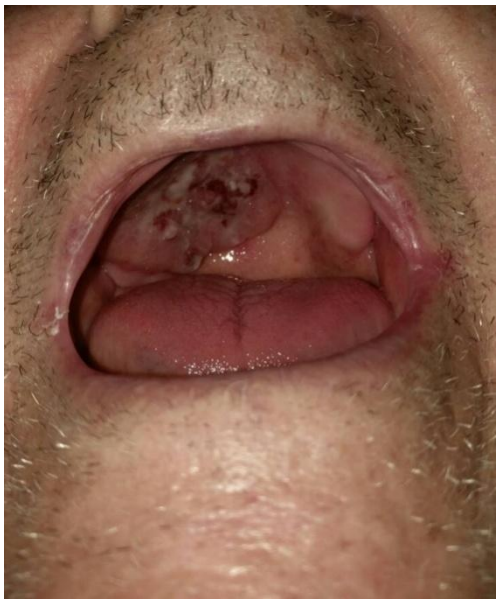

figure 1:Blackish-grey bleeding lesion occupying the hard and soft palate, which proved to be primary malignant melanoma

Discussion

Oral melanomas can be primary or metastatic. Criteria for diagnosis of primary OM include presence of intraepithelial activity, evidence of malignant melanoma in the oral mucosa, and lack of any extraoral primary melanoma. Patients with OM can be staged according to the Union for International Cancer Control (UICC) as follows: Stage I confined to oral cavity, Stage II with positive cervical nodes, and Stage III with distant metastasis. The patient in our case is classified as Stage III[3]. Differential diagnosis of OM consist of oral melanotic macule, smoking-associated melanosis, drug-induced melanosis, melanoacanthoma, post-inflammatory pigmentation and Kaposi's sarcoma[1].

Apart from metastatic melanoma, there is also the case of primary melanoma of the small bowel. Clinical criteria for differentiation of primary from metastatic small bowel melanoma include lack of concurrent or previous removal of a melanotic lesion, no other organ involvement, in situ change in adjacent GI epithelium and disease free survival of 12 months after initial diagnosis. In the matter of metastatic melanoma, recent studies have implicated the chemokine receptor CCR9 and its ligand CCL25 as signals that allow malignant cells to metastasize to the small bowel. Ultimately, most of these patients have a bad prognosis, with a median survival of 4 to 6 months[5].

Conclusion

Melanoma of the palate metastasizing to the small bowel is a rare condition with poor prognosis[6]. This case shows the importance of early diagnosis of the primary tumor, so that the consequences of metastatic melanoma can be avoided, and for the best therapeutic choices to be applied.

Ethical approval: As per international standard or university standard written ethical approval has been collected and preserved by the authors. The research was conducted ethically in accordance with the World Medical Association Declaration of Helsinki.

Data availability: The data that support the findings of this case report are available from the corresponding author I. Galanis, upon reasonable request.

References

1.Deyhimi P., Razavi SM., Shahnaseri Sh., Khalesi S., Homayoni S., Tavakoli P. Rare and Extensive Malignant Melanoma of the Oral Cavity: Report of Two Cases. J Dent Shiraz Univ Med Sci., 2017 September; 18(3): 227-233

2.Singh H, Kumar P, Augustine J, Urs AB, Gupta S. Primary malignant melanoma of oral cavity: A report of three rare cases. Contemp Clin Dent 2016;7:87-9

3.Kumar V, Vishnoi JR, Kori CG, Gupta S, Misra S, Akhtar N. Primary malignant melanoma of oral cavity: A tertiary care center experience. Natl J Maxillofac Surg 2015;6:167-71

4.Priya Sara Thomas, Gogineni Subhas Babu, Rangare Laxman Anusha, Shishir Shetty. Oral malignant melanoma-an unusual presentation. Gerodontology 2012; 29: e1241-e1243

5.Matthew B. Ostrowitz, Mark S. Cohen, Mazin Al-kasspoles. A Patient With Metastatic Melanoma of the Small Bowel. Melanoma, Oncology Journal, www.cancernetwork.com/melanoma/patient-metastatic-melanoma-small-bowel

6.Munde A, Juvekar MV, Karle RR,Wankhede P. Malignant melanoma of the oral cavity: Report of two cases. Contemp Clin Dent 2014;5:227-30