Oral Melanosis

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ABSTRACT

There is very little information in literature about oral melanosis not associated with racial pigmentation or secondary to other syndromes. Various stimuli that can result in an increased production of melanin at the level of mucosa include trauma, hormones, radiation and medications. Three such cases are reported in which stimulus for genesis of melanosis was mechanical trauma in form of smoking.

Keywords: Oral, Melanosis, Smoking.

INTRODUCTION

In our clinical practice we see many cases of oral pigmentary lesions, the etiology of which ranges from physiologic changes (e.g. racial pigmentation) to manifestations of systemic illnesses (e.g. Addison’s disease) and malignant neoplasms (e.g. melanoma and Kaposi’s sarcoma). There is very little information in literature about oral melanosis not associated with racial pigmentation or secondary to other syndromes. We are reporting three such cases of oral melanosis which presented at different subsites in contrast to sites commonly seen in literature. Here is review of literature of oral melanosis in terms of its etiology, pathophysiology, clinical presentation and differential diagnosis.

CASE REPORT

First case was a 38-year-old female who presented with brown pigmentation on ventral aspect of tongue (Fig. 1) and the history of tobacco use in form of chewing was present for a period of 6 years. Second case was a 54-year-old male, presented with brown pigmentation on dorsum of tongue (Fig. 2) and history of smoking for the last more than 15 years. Third case was 59-year-old male, presented with brown black pigmentation on inner aspect of lip mucosa (Fig. 3). Patient was chronic smoker for last 20 years. All cases were clinically asymptomatic. In all cases, biopsy of the lesion was taken to confirm the diagnosis and to rule out oral melanoma as the lesions were present on subsides other than commonly seen in melanosis. Reassurance was given to all the cases. Lesion reduced after one year of stopping smoking.

DISCUSSION

Oral melanosis is a benign focal pigmentary (brown or black) lesion of the oral cavity mucosa, though cases of melanosis have been reported on sinonasal, pharyngeal, conjunctival and laryngeal mucosa also. Oral pigmentation is caused by exogenous (foreign body implantation) and endogenous pigmentation. Primary pigments responsible for endogenous pigmentation include melanin, melanoid, oxyhemoglobin, reduced hemoglobin and carotene. Out of these pigments, melanin is the most common endogenous pigment which is
oral melanosis is one of the clinical manifestations. Smoker’s tobacco smoke induces oral mucosal changes in which intraoral mucosal melanin pigmentation with special reference to the influence of smoking. Clinically, the lesion usually presents as multiple brown pigmented macules less than 1 cm in diameter, localized mainly at the attached labial anterior gingival and the interdental papillae of the mandible. The microscopic appearance of melanosis is essentially similar to that seen in physiologic pigmentation or a melanotic macule. Oral melanosis is benign condition but biopsy should be performed if there is surface elevation or increased pigment intensity or pigmentation is in an unexpected site. In conclusion of study conducted on primary malignant melanoma of oral cavity in Japan with special reference to melanosis, it was suggested that more than one third of the malignant melanomas develop from oral melanosis. The incidence of melanosis associated with oral melanoma was also observed among Caucasians as per reviewed by Chaudhary et al and in 50% of 12 melanomas collected by Moore and Martin, the pigmentation had been present for 1 to 5 years before melanoma developed. Oral melanosis should be differentiated from ephelis, which is a circumscribed brown macule over skin that has been exposed to sunlight and shows increased melanin pigmentation in the basal cell layer without an increase in the number of melanocytes. Since melanotic macules of the oral mucosa do not exhibit a significant increase in the number of melanocytes, the term lentigo is not considered appropriate for this type of lesion.

CONCLUSION

Oral melanosis is benign pigmentary lesion of oral mucosa. It is seen more often in smokers. Though it is clinically asymptomatic, but remains a matter of concern to rule out underlying malignancy. Biopsy is considerable if there is surface elevation or increased pigment intensity or pigmentation is in an unexpected site.

REFERENCES