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Oral Melanoacanthoma

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Updated: May 23, 2012

Background

Melanoacanthoma is a rare condition of oral mucosa that has been reported only in the last century. The lesion is characterized by a proliferation of both melanocytes and keratinocytes that results in pigmented macular or plaquelike lesions (see image below).

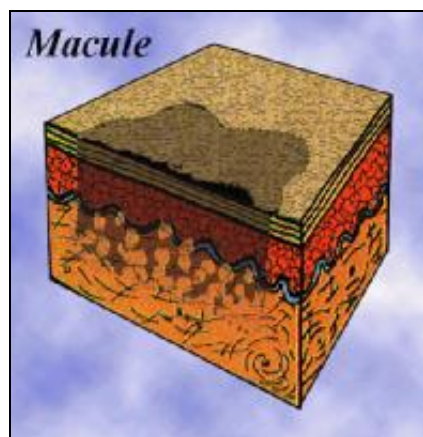


Diagram of a pigmented epithelial macule.

Oral melanoacanthoma is regarded by many as a reactive condition unrelated to cutaneous melanoacanthoma, but the histologic features are similar. Cutaneous and mucosal melanoacanthoma differ in terms of patient age, patient race, and site.

In 1927, Bloch provided the earliest known description of melanoacanthoma, which was reported in the German literature.^[1] Bloch described several skin lesions, which he originally called benign nonovoid melanoepithelioma of the skin. He further subdivided his cases into 2 types: In the histologic samples studied, type 1 had both dendritic melanocytes and keratinocytes, whereas the histologic appearance of type 2 was similar to that of type 1, but it lacked the dendritic melanocytes.

In 1960, Mishima and Pinkus reexamined the condition and further refined the diagnostic terminology.^[2] The condition that Bloch designated as type 1 is currently called melanoacanthoma, and type 2 is currently called pigmented seborrheic keratosis.

Although cutaneous lesions of melanoacanthoma were reported as early as 1927, Tomich et al at the American

Academy of Oral Pathology first reported oral mucosal lesions in 1978.^[1] Although many authors subsequently published case reports, Goode et al published the first case report in 1983.^[3] This was a retrospective review of 10 cases of oral melanoacanthoma reported in the literature.

To date, oral melanoacanthoma remains a rare condition, with approximately fewer than 100 reported cases. The cutaneous variant is also rare; however, it is more prevalent than the mucosal variant.

Pathophysiology

The mucosal variants of melanoacanthoma have histologic appearances similar to that of cutaneous melanoacanthoma. The lesion consists of proliferating melanocytes and keratinocytes, which result in large pigment-containing dendritic cells. The dendritic cells are present throughout the middle and upper layers of the epithelium.

Inflammation occurs almost universally in patients with mucosal lesions. The presence of inflammation and the spontaneous resolution of oral lesions are suggestive of a reactive process rather than a neoplastic process. The observation of trauma and inflammation associated with oral lesions has led to the conclusion that the mucosal variant is likely the result of a reactive process rather than a neoplastic process.^[4]

Epidemiology

Frequency

United States

Oral melanoacanthoma is rare, with only approximately fewer than 100 cases reported since 1978,^[5, 6, 7] when the lesions were first reported. The cutaneous variant is more common, but it is still relatively rare among skin lesions. Among all the cases reported, specific patterns are described with respect to the race, sex, and age of patients with cutaneous melanoacanthomas and those with mucosal melanoacanthomas.

Race

Cutaneous lesions of melanoacanthoma are reported almost exclusively in white patients. The mucosal variant is reported almost exclusively in black patients.^[8, 9] Some sporadic mucosal cases are reported in Asian individuals.

Sex

The prevalence for both variants of melanoacanthoma is fairly equal in both sexes, with a slight female predominance.^[10] The female-to-male ratio is approximately 3:2.

Age

The age distributions of the 2 types of melanoacanthoma differ.^[11] Cutaneous lesions are found in patients with a mean age of approximately 60 years. Mucosal lesions appear in patients with a mean age of approximately 25 years.

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Disclosure: Nothing to disclose.

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Disclosure: Nothing to disclose.

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