

Melanocarcinoma of the buccal mucosa

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The primary malignant melanoma of the buccal cavity is not a very common neoplasm, but it is one that is not difficult to diagnose. Thus far about 109 cases of this lesion have been published.

Unlike the melanocarcinoma of the skin, which occurs with the same frequency in both sexes, the melanocarcinoma of the buccal mucosa is found in males twice as often as in females. In about 30 per cent of the reported cases the patients have been more than 30 years of age, and in about 75 per cent they were past 40. The greatest incidence is in the fifth decade of life.

The malignant melanoma of the buccal cavity is more frequent in the maxilla. In their study of 106 cases, Chaudhry and associates¹ found that 80 per cent of the lesions occurred in the maxilla, with the rest located in the mandible, cheeks, tongue, and floor of the mouth (in that order). They also found that among the maxillary lesions 51 per cent were located on the hard palate, 26 per cent on the alveolar ridge, 8 per cent on the soft palate, and the remaining 15 per cent in more than one site.

More than 30 per cent of the melanocarcinomas reported were preceded by melanotic spots (in some cases congenital) of varying intensity, which gradually increased in size.

Histologically, these lesions show wide variation. In some cases they simulate epidermoid carcinoma, being composed of large cells with a large amount of cytoplasm. The nuclei may show pleomorphism with a tendency toward hyperchromatism. In other cases the tumor might be composed of elongated cells with well-defined edges and a variable amount of cytoplasm, reminding one of sarcoma. Between these two extremes, there is a wide variation. When

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melanin is present, the diagnosis is generally easy. Pigmentation of varying amounts may be found intra- and extracellularly. When no melanin is present, cell distribution and shape are highly suggestive. Diagnosis, however, may be confirmed by means of the hydroxyphenylalanine reaction.

The melanocarcinoma of the buccal cavity has a tendency to form regional and distant metastases. Metastases in the regional lymph nodes have been found in 50 per cent of the cases. In 20 per cent there has been evidence, either clinical or roentgenographic, of metastases in the lungs, liver, brain, and bones.

Oral melanocarcinoma is more difficult to diagnose and treat than melanocarcinoma of the skin, for the following reasons:

1. Melanocarcinoma of the skin is easy to find because of its external location.
2. The buccal melanocarcinoma becomes ulcerated easily because of the constant trauma promoted by functional requirements. This carries on the formation of metastases.
3. Because of anatomic differences, the oral cavity has less sensibility.
4. The absence of classic symptoms of induration can lead to a wrong diagnosis and delay treatment.
5. Multiple primary lesions in the mouth are more difficult to treat, as noted by Moore and Martin.²

There is some disagreement as to the origin of melanomas and pigmented nevi. Some writers state that these lesions start from the specialized epithelial cells and are probably related to Merkel's or Ranvier's corpuscles. Others believe that they originate from ordinary epidermal cells. A third group contends that their origin is in the dermal nerves.³

According to Ackerman and del Regato,⁴ the 5 year survival rate is only about 30 per cent in patients without regional metastases.

CASE REPORT

A 56-year-old woman had a lesion in the anterior portion of the palate involving the alveolar ridge on one side. The family medical history yielded nothing remarkable. Her own medical history disclosed an old silicosis, under control, and extirpation of a cervical node for reasons that she was unable to explain. This operation was performed long before her present illness, but the date could not be determined.

The patient said that a maxillary anterior tooth had been extracted about 3 months prior to the present examination. Intense pain developed in the wound, with hemorrhage and pronounced halitosis. Examining her mouth, she realized that a congenital black spot she had known to exist on the palate had grown in size and had become ulcerated. Weight loss and anorexia had caused a general weakness.

Physical examination

The patient was pale and thin. The mouth was in poor hygienic and functional condition, and nearly all of the teeth had been lost. There was a blackish brown lesion involving the anterior two thirds of the anterior part of the palate. In the incisive area there was an ulceration with irregular edges; this was deeply pigmented, possibly with melanin (Figs. 1 and 2). On the alveolar ridge at the left premolar area there was a mass, 1 cm. in diameter, of the same blackish brown color. The pigmentation spread as far as the soft palate toward the fauces and from the mucosa of the right cheek toward the inferior vestibule and the upper and lower lips. The lesion was firm and painless, and it bled easily when touched. No cervical lymph nodes were palpable.

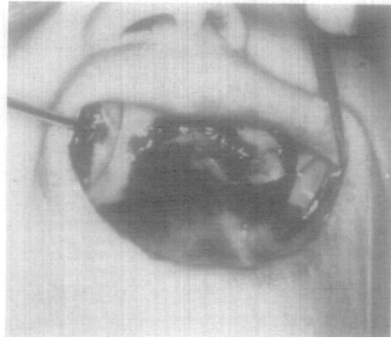


Fig. 1. Ulceration and pigmentation.



Fig. 2. Deep pigmentation of alveolar ridge.



Fig. 3. Roentgenogram of duodenum and stomach showing no organic lesions, tumor, or abdominal cyst.

Roentgenographic examination

Films made following ingestion of barium sulfate showed the jejunum and ileum pushed upward and to the left by a hard abdominal mass the size of an adult human head. The colon was also misplaced by this mass.

Roentgenograms of the intestinal tract revealed no abdominal tumor or cyst (Fig. 3). Films of the thorax showed the old pulmonary silicosis but no neoplastic lesions.

Diagnosis

These findings led to a presumptive diagnosis of primary melanocarcinoma of the buccal mucosa with metastasis to the abdominal region. The patient was sent to the National Institute of Radium, where an exploratory laparotomy disclosed a large dark tumor occupying the entire abdomen and pelvis.

Histologic studies at the San Juan de Dios Hospital, the National Institute of Radium, and the University of Chile School of Dentistry confirmed the diagnosis of melanocarcinoma of the buccal mucosa (Figs. 4 and 5).

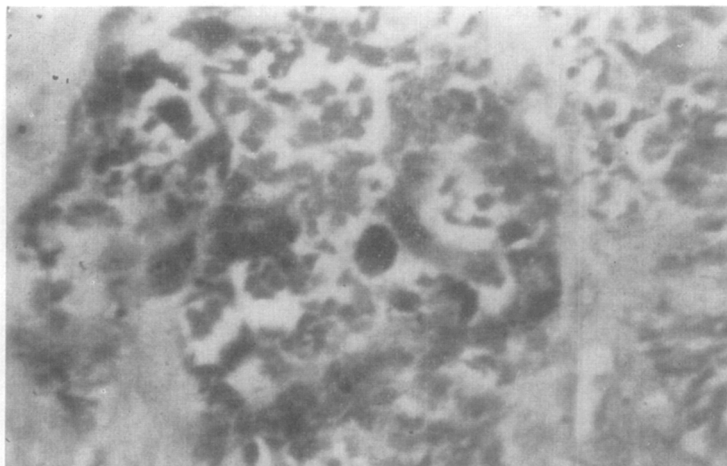


Fig. 4

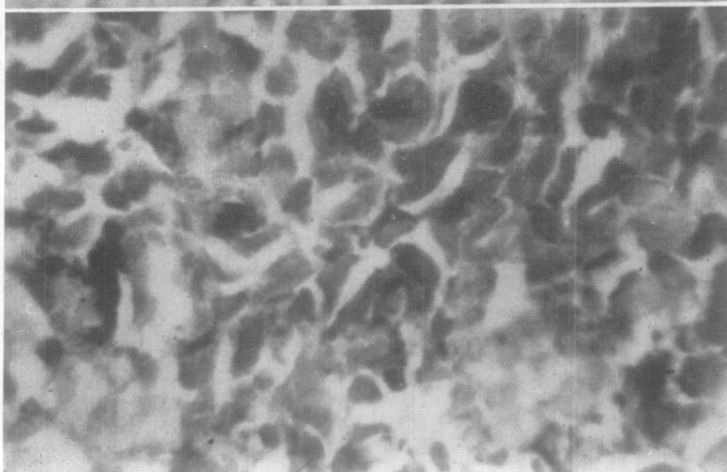


Fig. 5

Fig. 4. Medium-power photomicrograph showing necrosis and pigmentation.

Fig. 5. High-power photomicrograph of section shown in Fig. 4.

DISCUSSION

We believe that this case illustrates a typical manifestation of a primary melanocarcinoma of the buccal mucosa which probably started in the previously existent melanotic spot (nevus?) and developed rapidly following extraction of a tooth. Another interesting feature was the presence of metastases in the abdominal region without regional lymph node involvement.

This case also demonstrates the importance of a thorough preoperative examination. In the presence of a neoplasm, such as a melanocarcinoma, no operation should be performed locally without complete extirpation of the lesion, no matter how small it may be, since surgical intervention could start a sudden growth and dissemination of tumor cells and result in metastasis to other parts of the body.

SUMMARY

The general characteristics of melanocarcinoma of the buccal mucosa have been described, and a case of buccal melanocarcinoma with metastasis in the abdominal region has been reported.

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