MALIGNANT MELANOMA OF ORAL CAVITY
(Case report)

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Summary

Primary malignant melanoma of oral cavity is very rare. A case of oral melanoma who died due to metastasis a year after the excision of the primary lesion is reported along with a brief review of the literature.

Primary melanoma of the oral cavity is very rare[1,2]. Its incidence as reported by various authors[3-6] ranges from 0.9 to 2.4 percent. A good riview of oral melanoma was published by Chaudhry and associates[7] in 1958 who analysed 105 cases collected from the literature. In 1969 Charkoudin[8] collected 18 cases from the literature published after Chaudhry's review and added a case of his own. Since then few more cases have appeared in the literature[9,9-14].

Recently we got an opportunity to see primary malignant melanoma of the oral cavity in a female patient. The rarity of the disease prompted us to report this case.

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Received for Publication on 11—5—1977

Case Report

A 45 year old woman was admitted in JIPMER on 21st Sept. 1974 with complaints of painful black swelling on the roof of her mouth for one month which used to bleed while chewing food. One month prior to this she was perfectly alright and was not aware of any pigmented spots in the oral mucosa. There was no history of such disease in the family.

On general physical examination no abnormality was detected. There was no evidence of external facial swelling. Submandibular and cervical lymph nodes were not enlarged. Intra-oral examination showed normal teeth and mucous membrane except the hard palate, where a circumscribed black patch (Fig. 1 Page No. 117). 6.2x4.4 cm in size was present, extending from the maxillary incisors upto the level of 2nd maxillary molars. On the anterior part of this patch there was an elevated, black, soft and tender swelling (1cm x 1cm) having lobulated non-ulcerative surface. The lingual gingivae of left maxillary teeth were also black and teeth were nonmobile but tender on percussion. Examination of nose and throat was normal.

Diagnosis was clinical. Roentgenograms of the paranasal sinuses, upper and lower jaws and chest were normal. Her haemogloblin, leukocyte count (total and differential) and urine analysis were normal.

Operative Procedure

Under orotracheal anaesthesia a partial resection of the left maxillary alveolar process and sub-total excision of the mucoperiosteum of the hard palate and part of the soft palate on left side was done. To promote better healing, a split skin graft was placed over the raw area. The graft was kept in place by a splint made from the slant mould compound. On left side the splint was suspended by circumzygomatic wiring and on right side by per alveolar wiring. Excised tissue was sent for histopathological examination, which showed malignant melanoma. The post operational recovery was uneventful. Patient was discharged on 20—11—74 and advised to come after a month for partial denture and follow up.

Follow up

Patient was found in good health on her 1st follow up two months after the operation. The operated area was normal. There was no lymphadenopathy and chest was clear. Partial denture was applied. She continued to come for follow up regularly till June, 1975 after which she stoped coming and upto that time there was no sign of recurrence or metastasis. In December 1975 after a gap of nearly five months she returned in a very bad condition. She was having difficulty in breathing and dry cough. She was ematiated, anemic and depressed. The operated site and cervical lymph nodes were normal. Abdominal, vaginal and rectal examinations revealed no evidence of any malignancy. Chest X-ray showed multiple cannon ball like opacities in both lung fields with pleural effusion over the bases. Due to increasing respiratory distress therapeutic pleural effusion tapping was done on first and third day. Each time she felt temporary improvement in symptoms. She died on 4th day due to massive pleural effussion.

Discussion

Melanomas comprise 2% of all the cancers[15] and oral melanoma constitutes about 2% (Table I) of all the melanomas.

TABLE I

(incidence of oral melanoma)

Authors	Total cases of melanoma	Incidence of oral melanoma per hundred patients
Pack et al (1947)[3]	862	1.6
Morris and Horn (1951)[4]	287	2.4
Allens and Spitz (1953)[18]	337	5.6
Moore and Martin (1955)[5]	1546	1.7
Charalambridis & Patterson (1962)[6]	250	2
Grinspan et al (1969)[7]	110	0.9

Oral melanomas show a striking predilection for involvement of the maxillary alveolar mucosa and the hard and soft palates. The tumor occurs in men about twice as often as in women[5,7,14]. Oral melanomas are soft, painless and at times haemorrhagic. They may be the size of a lentil or may measure several centimeters. They do not present an indurated base but when located in gingivae they may loosen the teeth or become adherent to the deeper planes and destroy the underlying bone. In our case the melanoma was over the hard palate it was slightly painful haemorrhagic. There was no bony involvement as reported by Pandhi et al[10], Chaplet and Bhatia[12].

Allen and Spitz[18] believed that with the exception of the rare malignant blue nevus, all melanomas of the skin and mucus membranes arise from a

junctional or compound nevus. On the other hand Becker[19] estimated that only 23% of the melanoma arise in pre-existing nevi. Similarly Lund and Kraus[20] believe that many melanomas arise in what was previously considered to be normal skin besides the lentigo and junctional areas of benign mole. Takagi et al[21] found pre-existing melanosis in 33% cases of oral melanoma in Japanese, but junctional nevus rare to cause oral melanoma in their patients. Sampat and Sirsat[16] reported more existing melanosis in 57.8% cases of oral melanoma in Indian patients. Our case was not aware of any pigmentation in the oral cavity prior to the onset of pain and so it is difficult to say whether melanoma developed from normal mucosa or from pre-existing melanosis.

Diagnosis of melanoma should be made on the basis of clinical examination because biopsy procedure might provoke dissemination, although some authors[16,22-23], do not believe this. Only in case of doubt would biopsy be justified and then it should be performed by freezing or cryostat procedures in the operating room in order that an immediate resection may be performed should malignancy be confirmed.

Like skin melanomas mucosal melanomas are also resistant to radiotherapy and cytotoxic agents have only a palliative action[24]. Immunotherapy is still in the primitive stage[25] and thus surgical intervention is the only treatment[1]. Surgical procedures should be extensive and bone resection should be performed when the lesions are adherent to osseous tissue. To prevent the possibility of malignant degeneration in cases of melanocytic nevi in the oral cavity prophylactic resection should be performed[26]. According to Ghamarawi and Glennie[27] survival period can be enhanced if radical surgery is preceded by high dose irradiation.

Prognosis of oral melanoma is considered to be very poor[3a,24]. Five years survival rate after diagnosis is not more than 6%[19]. According to Chaudhry and colleagues[7] in a series 93 patients with melanoma only 3 survived more than 5 years. Majority of these patients die within 1 to 2 years of the onset of melanoma, with lymph node metastasis followed by visceral involvement especially in the brain, lungs, spine and liver. Our patient died one year after operation of the primary lesion due to metastasis in the lungs. Grinspan et al[1] believed that the survival period in melanomas originating from malignant lentigo is longer. Similarly juvenile melanoma follow a favourable course if subjected to total resection[28].

Prophylaxis unless oral pigmentation is unequivocally racial in origin or can be clinically demonstrated to be caused by a material or pigment other than melanin, excision biopsy is indicated (26) because 25% of melanomas appear clinically innocent as pigmented spots.

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