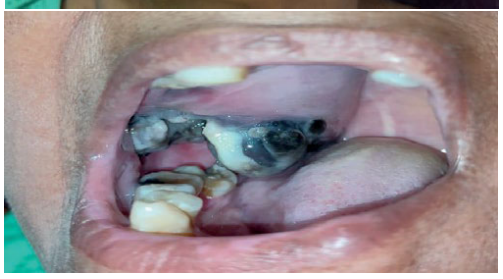
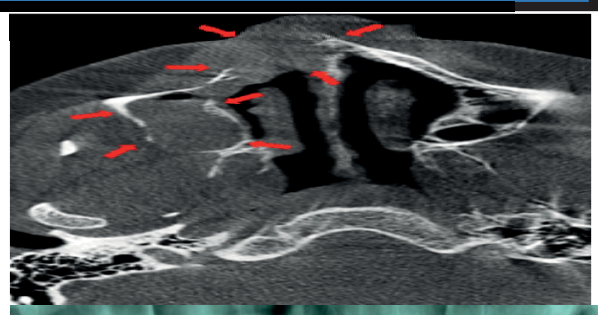
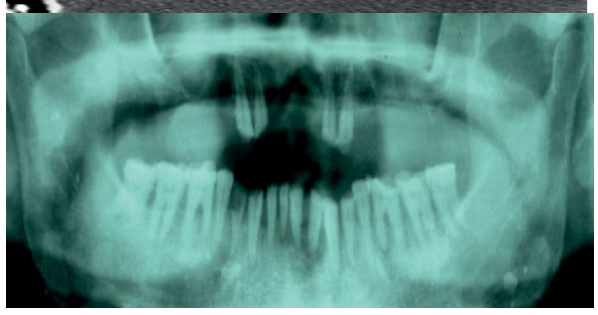
ORAL MUCOSAL MELANOMA- A CASE REPORT AND A REVIEW OF FACTORS AFFECTING PROGNOSIS OF PATIENT



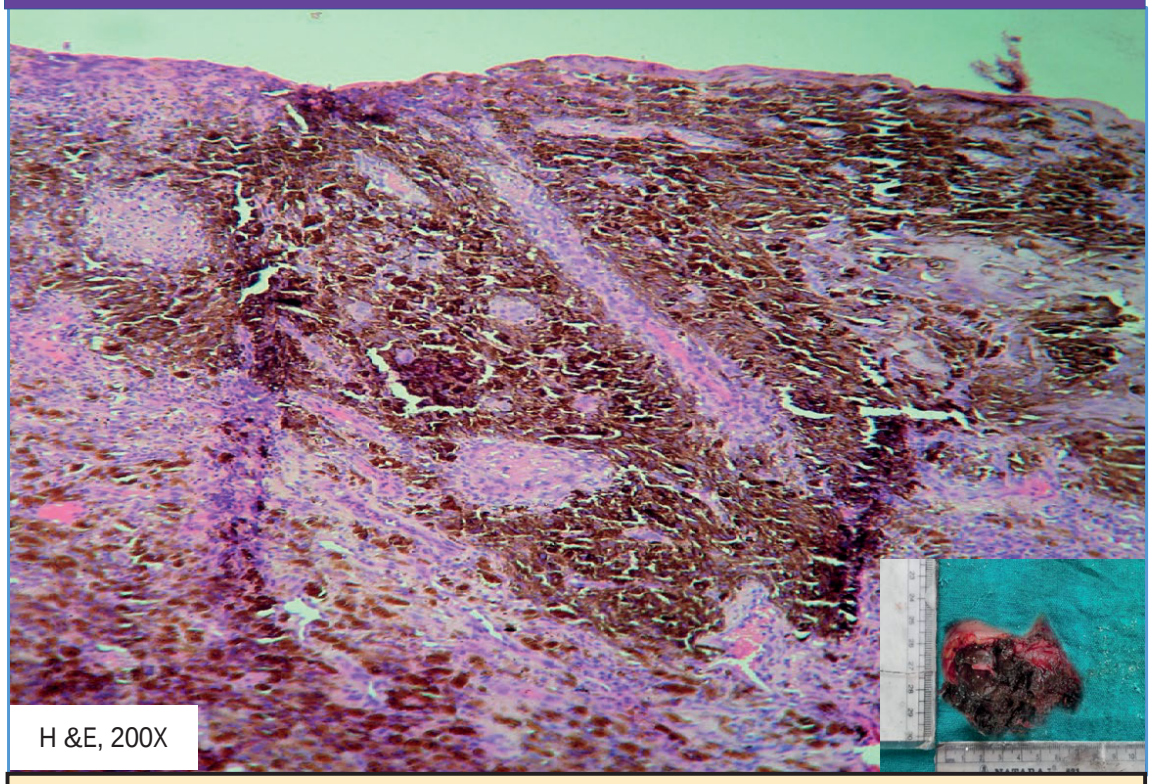
HISTORY

- 65/F complains of pain, swelling, & black discoloration right maxilla for 1 year
- **Extraoral:** 8 cm x 5cm in right maxillary region obliterating nasolabial folds & drooping of corner of mouth with normal overlying skin
- **Intraoral:** Diffuse, non-tender, soft swelling (7cm x 5cm), Black, nodular and asymmetrical hyperpigmentation





HISTOPATHOLOGICAL FEATURES



Dysplastic epithelium with atypical melanocytes showing features like nuclear pleomorphism and hyperchromatism seen proliferating into the connective tissue stroma as a vertical growth phase

PROGNOSIS OF PRESENT CASE

Location	Right quadrant of maxilla
Distant metastasis: nil	Better prognosis
Lymphatic invasion: Level 1A, 1B, IIA, and IIIrd palpable	Poor prognosis
Mitotic index: >4/10 hpf	Poor prognosis
Nuclear atypia: >30% present	Poor prognosis
Degree of pigmentation: >50% cells pigmented	Better prognosis
Presence of ulceration: Present	No prognostic significance
Level of infiltration/ invasion: Deep with bone resorption of the maxillary sinus and lateral nasal wall.	Poor prognosis

Therefore, the overall impression was that the prognosis of the patient was poor, but with adequate management a better outcome is expected.

PROGNOSTIC FACTORS AFFECTING SURVIVAL

Prognostic Factors	5-year survival rate
Age of patient	<30 years of age= 87%, , >65 years of age= 60%
Sex	Women= 86%, Men= 68%
Lymph Node Involvement	No. of Lymph nodes involved 1= 52%, 2-3=50%, 4 or more=37%
Tumor Thickness	<1 mm= 80-90% 1-2 mm= 70-80% 2.1-4 mm= 60-70% >4 mm= 50%
Ulceration	Ulcerated have 4% less than non-ulcerated
Clark Level	I=97% II=95% III, IV=80-85%
Tumor Vascularity	Prominent vascularity show more relapse and death rate More studies required to comment on survival rate
Lymphovascular Invasion	Without= 50% With= 25%
Tumor-Infiltrating Lymphocytes	brisk infiltrate= 77% Absent= 37%
Distant Metastasis	Less in involvement of lung or other visceral organs

PROGNOSTIC BIOMARKERS

- Epigenetic factors: DNA methylation, microRNA, Long non coding RNAs, Histone modifications
- Circulating tumour products like circulating tumour cells, nucleic acids, melanoma exosomes and serologic
- Oncogene, antioncogene, and metastasis suppressor
- Cell proliferation and Autophagy
- Inflammatory
- Mitochondrial activity

REFERENCES:

1. Levine D, Fisher DE. Current status of diagnostic and prognostic markers in melanoma. Molecular Diagnostics for Melanoma: Methods and Protocols. 2014:177-97. 2. Kashani-Sabet M. Molecular markers in melanoma. British journal of dermatology. 2014 Jan 1;170(1):31-5. 3. Meleti M, Leemans CR, Mooi WJ, Vescovi P, van der Waal I. Oral malignant melanoma: a review of the literature. Oral oncology. 2007 Feb 1;43(2):116-21. 4. Ashok S, Damera S, Ganesh S, Karri R. Oral malignant melanoma. Journal of Oral and Maxillofacial Pathology: JOMFP. 2020 Feb;24(Suppl 1):S82.