Original Research Paper

Volume-9 | Issue-6 | June-2019 | PRINT ISSN No. 2249 - 555X

Pathology

SPINDLE CELL MELANOMA OF ORAL CAVITY

Dr Muktanjalee Deka — Associate Professor, Department Of Pathology, Guwahati Medical College And Hospital

Dr Swastika Padmapati* — Post Graduate Trainee, Guwahati Medical College And Hospital*Corresponding Author

ABSTRACT Primary mucosal melanoma of oral cavity is an exceedingly rare neoplasm comprising 1-2% of all oral malignancies .The predominate localisation of this entity is hard palate and maxillary alveolus. Here we present a case of Spindle cell Melanoma of oral cavity ,which itself is a rare morphological subtype of Melanoma.

-A 55 year old male reported with ulcer over hard palate , swelling right cheek, bleeding from hard palate, facial pain and nasal congestion since 6 months. CECT revealed enhancing lobulated soft tissue lesion over right premaxilla & hardpalate. Right segmental maxillectomy was done and specimen was sent to GMCH for histopathological examination revealing Spindle cell melanoma . Diagnosis confirmed by Immunohistochemistry analysis.

Spindle cell melanoma is a rare malignancy and oral cavity being a rarer location, carrying poor prognosis. Combination of histopathological examination and immunohistochemistry is mandatory for diagnosis

KEYWORDS : spindle cell melanoma,maxillectomy, immunohistochemistry

INTRODUCTION

*Primary oral mucosal malignant melanoma is a rare neoplasm and represents 0.2-8% of all melanomas and 0.5% of all oral malignancies. It occurs mainly in hard palate and maxillary alveolus.[1]

*It is usually reported in patients between 60-80 years of age and has a male predilection.[2]

*Spindle cell melanoma is a rare morphological subtype of melanoma.

*Its incidence has been variably reported between 3 to 14 % of all melanoma cases (including desmoplastic melanoma).[2]

*Unlike cutaneous melanomas, mucosal melanomas have no apparent association with UV radiation exposure. However trauma has been suggested as a possible cause.

CASE REPORT

A 55 year old male presented with ulcer over hard palate and swelling in right cheek since six months, which is insidious in onset , gradually progressive in size. He also had a single episode of bleeding from hard palate along with dull aching right sided facial pain and nasal congestion. CT oral cavity revealed (27 X 28 X 23)mm^3 lobulated soft tissue density lesion involving premaxilla and hard palate, showing heterogenous post contrast enhancement suggestive of mitotic activity.

FNAC was performed and air dried smears were stained with MGG. Moderately cellular smears shows loosely cohesive fragments as well as singly dispersed hyperchromatic spindle cells in a clean background. The cells are having oval mildly pleomorphic nuclei and prominent nucleoli. No pigments seen. A diagnosis of spindle cell malignancy was made.

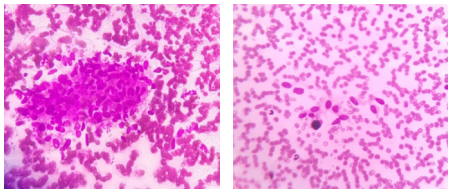
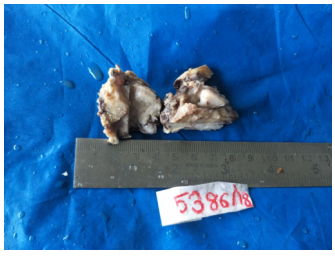


Figure1(400X view): fragments of hyperchromatic spindle cells with pleomorphic oval nuclei

The patient underwent right segmental maxillectomy and the specimen was sent to department of pathology , GMCH for histopathologic examination.

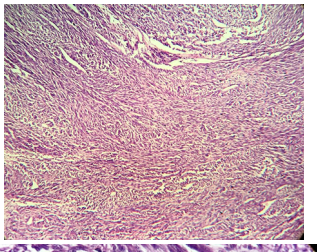
On gross examination of the specimen , a proliferative tumour mass measuring (3.5 X 3 X 3)cm^3 involving the lateral gingivoalveolar sulcus extending upto the inner side of hard palate was noted. Cut surface of tumour mass is homogenous solid greyish white.



Histopathological examination shows malignant spindle cells in fas cicular pattern having hyperchromatic nuclei ,conspicuous nucleoli , and eosinophilic cytoplasm . There Is presence of mitotic activity.

Following differential diagnosis were considered.
*spindle cell melanoma
*spindle cell sarcoma
*fibrosarcoma
*monophasic synovial sarcoma

A



B

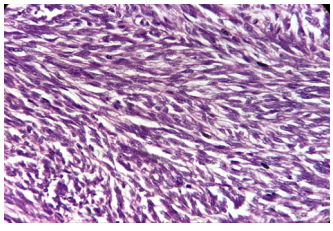


Figure 2 (A:100X, B:400X): malignant spindle cells having hyperchromatic nuclei, conspicuous nucleoli and eosinophilic cytoplasm .Atypical mitotic figures also noted

Immunohistochemical examination was performed with tumour cells showing positivity for

HMB45 ,MELAN-A , NSE, VIMENTIN AND S-100 and negati vity for EMA, CYTOKERATIN, DESMIN and SYNA PTOP HY SIN.

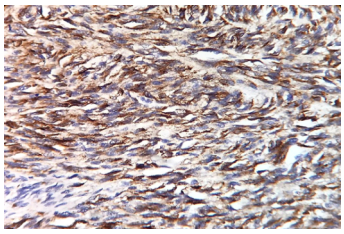


Fig.3(400X view): IMMUNOHISTOCHEMISTRY SHOWING HMB45 POSITIVITY

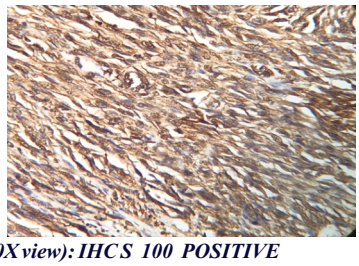


Figure 4(400X view): IHC S 100 POSITIVE

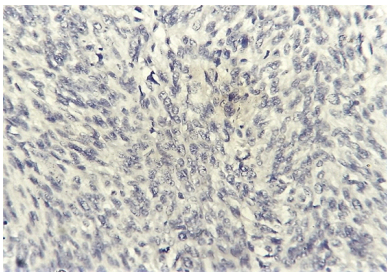


Figure 5(400X view): IHC DESMIN NEGATIVITY

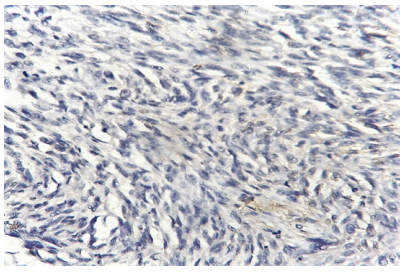


Figure 6(400X view): IHC SHOWING CYTOKERATIN NEGATIVITY

The tumour was reported as SPINDLE CELL MELNOMA of the maxillary alveolus based on histopathologic as well as immunohistochemistry examination.

DISCUSSION

*Primary malignant melanoma evolves from the neoplastic transformation of the melanocytes, with spindle cell melanoma being a rare morphological subtype.

*Mucosal melanomas are rare ; the common sites for mucosal melanomas are the orbit , the oral cavity, the nasal cavity, external genitalia, vagina and anus[3].

*In general ,mucosal melanomas are associated with aggressive behaviour and poor prognosis[4].

*The spindle cell variant is characterised by cells with elongated , narrow tapering , cytoplasmic process; which may be confused with cells of mesenchymal derivation and therefore misdiagnosed as a variety of connective tissue neoplasms.

*Other differential diagnosis of spindle cell malignancy like spindle cell squamous carcinoma, spindle cell sarcoma and monophasic synovial sarcoma should be taken into consideration.

*Immunohistochemistry is necessary to establish diagnosis.

* Surgery is the only identified treatment modality of spindle cell melanoma. Wide local excision with clear margins, sentinel node biopsy and regular follow up examination are crucial in management as metastasis is possible after surgery.[5]

* Prognostic factors include tumour thickness, presence or absence of ulceration ,mitotic rate, satellite deposits, local recurrence ,histologic subtype and lymphocytic infiltrate.

*The overall five year survival rate varies from 20-95% depending upon the stage of the disease in which the patient is diagnosed.

CONCLUSION

Primary spindle cell melanoma of maxillary alveolus is a rare tumour , that need to be diagnosed early for prompt treatment and better patient survival. It often carries a poor prognosis. Combination of histopathological and immunohistochemistry examination is mandatory to establish the diagnosis.

REFERENCES

1. MeletiM,Leemans CR,Mooi WJ,Vescovi P,van der Waal I. Oral malignant melanoma:A review of the literature. Oral Oncol2007;43:116-21.
2. Kim J, Lazar A J, Davies MA , Homsi J,PapadopoulosNe, HwuW J,Bedikian A Y, Woodman SE, Patel S P and Kim KB:BRAF ,NRAS and KIT sequencing analysis of spindle cell melanoma. J Cutan PATHOL.39:821-825.2012
3. Iversen, K.,Robins, R.E. (1980) Mucosal melanomas. Am J Surg,139, 660-664.
4. Wanebo,H.J.,Woodruff,J.M., Farr,G.H. et al (1981) Anorectal melanoma. Cancer,47 ,1891-1900.
5. Sheff JS and Pane TA :Spindle cell melanoma arising from decades-old burn scar .Plast Reconstruction surgery.124:274e-275e.2009.