Rare Case Report On Malignant Melanoma Of Eyelid

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Abstract: Malignant melanoma of the eyelid skin arises from the malignant proliferation of melanocytes. Primary melanomas of the eyelid skin are rare. They account for <1% of all cutaneous malignant melanoma and about 1% of malignant eye tumors. As with melanomas of other sites, eyelid melanoma are usually a result of DNA damage from exposure to UVB(290-320),⁽¹⁾ other common risk factors include presence of nevi, fair skin and family history of melanoma. The most common location of eyelid melanomas is the lower eyelid, where it is approximately 2.6 times more likely to occur than the upper eyelid. Here we present a rare case of huge malignant melanoma of upper eyelid with distant metastasis.

Keywords: nevi, malignant melanoma, metastasis, upper eyelid.

I. Introduction

Case Report: A 45-year-old south Indian male presented to ophthalmology OPD, adichunchanagiri horspital and reaserch centre for evaluation of a right upper eyelid mass (Figure 1A). The mass had been present for approximately 4 months but had recently increased in size. A massive pigmented, protruding, ulcerated nodular mass measuring about 5.5 x 4.5 x 2.5 cm. was foul smelling ,painfull. causing total mechanical ptosis of right upper eyelid due to which other details of the eye could not be made out. Left eye had BCVA of 6/12. Anterior segment and fundus examination appeared normal in left eye. There was history of swelling in the right preauricalar area since 3 months. CECT showed heterogenous enhancing proliferative lesions noted in right upper evelid region abutting anterior eve ball with loss of fat plane with cornea, sclera of right eveball. No obvious extension into eyeball noted. Few enhancing nodes noted in the right preauricular region Ib, II, V largest lyphadenopathy with extracapsular spread infiltrating overlying skin underlaying masseter muscle. Right subdural collection noted with maximal thickness of 2.4cm with compression of underlying brain parenchyma. A enhancing dural thickening in right frontal region measuring 5mm. gross hydrocephalus noted involving bilateral III ventricales with normal IVth ventricle. since the tumor was highly necrotic, a fragment was obtained from right upper eyelid and right parotid region. Cytological features are suggestive of malignant melanoma right eye lid with metastatic deposits of malignant melanoma in right parotid region. All standard blood tests were normal except LDH was 378.0U/L. ECG and chest X-ray showed no significant pathology. Abdominal ultra sound showed benign renal cyst with rest visible structures appearing normal, whole body 99m Tc-MDP bone scan scintigraphy showed no skeletal metastasis.

Considering all there finding, since the patient general condition was bad, palliative therapy was advised.

II. Discussion

Abnormal proliferation of atypical melanocytes derived from the epidermis results in malignant melanoma. Four sub types as follows;^(2,3)

- a) Superficial spreading melanoma characterized by scattered or nests of epithelioid cells throughout the epidermis, and can exhibit vertical growth pattern.
- b) Nodular melanoma- composed of epithelioid cells, characterized by vertical growth pattern.
- c) Lentigo malignant melanoma characterized by atypical, mostly spindle shaped melanocytes at the basal epidermis.
- d) Acral lentiginous melanoma occurs on acral surface such as palms, soles, under nails and oral mucosa. Composed of atypical melanocytes arranged mostly as single units at the dermal epidermal junction^{.(4)}

The risk factors related to increased mortality in many patients affected by malignant melanoma are diverse and include: i) the speed of growth of the primary tumor lesion; ii)the histological findings⁽⁵⁾ here is an American Joint Committee on Cancer TNM Staging 7th edition.⁽⁶⁾

T refers to thickness and level of invasion.

- Tis, for which thickness is not applicable (NA) T1 <1.00mm thick
- T2 1.01-2.00mm thick
- T3 2.01-4.00mm thick
- T4 >4.00mm thick

T is further differentiated by ulceration and mitosis for T1-T4

- a: Without ulceration and mitosis <1/mm²
- b: with ulceration or mitosis >1/mm^2

N refers to involvement of lymph nodes

- N0 = 0 metastatic nodes
- N1 = 1

- N2 = 2-3

- N3 = 4+ metastatic nodes, or in transit metastases/satellites with metastatic nodes

N is further differentiated by nodal metastatic burden for N1-N3

- a: micrometastasis

- b: macrometastasis

For N3, there is the additional category:

- c: In transit metastases/satellites without metastatic nodes

M refers to metastasis

- M0 = No distant metastases

- M1a = Distant skin, subcutaneous, or nodal metastases with normal serum LDH

- M1b = Lung metastases with normal serum LDH

- M1c = All other visceral metastases with normal serum LDH or with any distant metastasis and elevated serum LDH.

From the above data our case can be staged as T4Bn2M1c.

The treatment of malignant melanoma remains complicated, due to the lack of many organ-preserving therapeutical options and the potential aggression of this kind of tumor ^(7,8). Its high relapse rate and high metastatic potential lead to difficulties in the control of the disease, even years after successfully removing the initial lesion ^(8,9). Complete tumor excision with subsequently adjuvant chemotherapy are the gold standard surgical technique, as in our case due to advanced stage of metastasis and physical condition of the patient does not support the surgical intervention, palliative therapy is suggested.

III. Conclusion

Malignant melanoma of eyelid, although being a rare entity, should be detected early, especially when growing on pre existing nevus to prevent life threatening implications, which has been documented in high number of cases.

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(Figure 1)

(Figure 2)



(Figure 3) Malignant Melanoma Of Upper Eyelid



(Figure 4) : Histology showing malignant cells



(Figure 5) Heterogenous lesion abutting the eye ball.



(Figure 6) . whole body 99m Tc-MDP bone scan scintigraphy showed no skeletal metastasis.



(Figure 7) Normal chest X ray