A rare case of lower eyelid fibrous histiocytoma

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Introduction

Eyelid tumors are the most common neoplasms in ophthalmology practice including a wide variety of benign and malignant tumors[1,2]. Approximately 5%-10% of all skin cancers and 15% of all face tumors occur on the eyelid[3]. As the eyelids are composed of both skin and mucous membrane including their supporting and adnexal structure, a great variety of tumors associated with skin and mucosa will be seen in or on the eyelids[4,5]. The eyelids are a rare location of Fibrous Histiocytoma (FH). It may involve the superficial eyelid skin and the deep tarsus and may be benign or malignant[4,6]. It appears as a solid mass with intact skin covering. FH represented 0.5% of all orbital tumors and 6% of all benign orbital tumors[4]. The malignant FH can invade the local surrounding tissue or may metastasize[1,7].

We present a rare case of lower lid FH. The case highlights the importance of suspicion of eyelid mass in each case and need for histopathological study in view of understanding the nature of mass, so that course of post excision management can be decided.

Case report

A 70-year-old male came to ophthalmology OPD, with complaints of gradually increasing painless swelling over the left lower lid since two years and foreign body sensation in the left eye since three weeks. On clinical examination, visual acuity in both eyes (OU) was 6/6. A nodule that was firm, nontender, well-circumscribed, not fixed to the overlying skin or underlying bone, was present in the left lower lid (1cm in diameter). Rest ophthalmic examination was within normal limits. There was no involvement of local lymph nodes such as preauricular or submandibular lymph nodes. There was no evidence of mass lesion at any other site. CT orbit was done to rule out involvement of the orbit and surrounding tissue. The patient underwent wide excision. Gross specimen of excised tissue was solid, firm in consistency and about 1cm in diameter. The histopathological features of the mass showed spindle shaped cells arranged in storiform pattern, fascicles and bundles confirming benign FH (fig. 1). Patient is being followed up for recurrence.

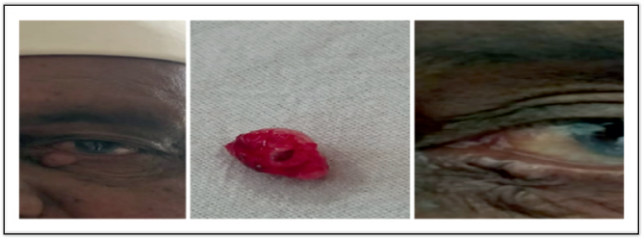

Figure 1: Pre- and post-operative images with gross specimen

Histopathological report

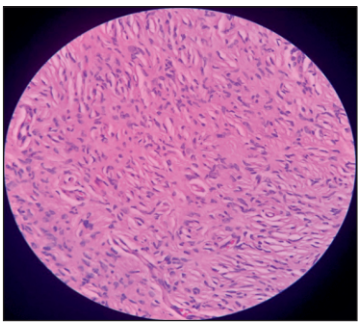

Figure 2: Spindle shaped cells arranged in storiform pattern, fascicles and bundles (Picture credit: Ref. book: Rosai and Ackerman's surgical pathology- 11th edition)

Discussion

The fibrohistiocytic tumors of the skin are a heterogeneous group of dermal/subcutaneous mesenchymal neoplasms. They may show fibroblastic, myofibroblastic and histiocytic (macrophage-like) differentiation[7,8]. "Fibrohistiocytic" means the morphologic similarity between the cells, fibroblasts and histiocytes[1,9]. (WHO classification for fibrohistiocytic tumors of the skin given in table 1).

Benign FH is a common soft tissue tumor that can be deep or superficially located[10]. Eksal Kargi et al in his study have noted clinical presentation of cutaneous FH involving eyelids as a rare location and case as an unusual clinical presentation[11]. On clinical examination a nodule was firm, nontender, and well-circumscribed, not fixed to the overlying skin or underlying bone, and was present in the left lower lid (1cm in diameter). After clinical suspicion decision of wide excision was taken. Moris et al has also recommended prompt excisional biopsy for eyelid tumors[12]. In the current study the only way of confirmation of the type of tumor was by doing histopathology examination. The mass after wide excision was sent for histopathological examination which showed spindle shaped cells arranged in storiform pattern, fascicles and bundles confirming benign FH diagnosis[10].

Table 1: WHO classification for fibrohistiocytic tumors of the skin

The WHO classification of 2005 includes the following entities as fibrohistiocytic tumors of the skin:

(A) Benign

1. Fibrous histiocytoma (FH)/ (synonymous: Dermatofibroma.) Variants of FH:
   - 1a. Cellular fibrous histiocytoma
   - 1b. Atypical (pseudosarcomatous) fibrous histiocytoma
   - 1c. Aneurysmatic fibrous histiocytoma
   - 1d. Epithelioid fibrous histiocytoma
2. Dermatomyofibroma
3. (Juvenile) xanthogranuloma
4. Intermediate: plexiform fibrohistiocytic tumor
5. Dermatofibrosarcoma protuberans
6. Atypical Fibroxanthoma

(B) Malignant

Fibrous histiocytoma

As the local recurrence and the metastasis of the tumor is known patient is being followed up regularly. Mohanty A et al in his study suggested that local recurrence is seen only if there is an incomplete excision of the lesion. Simple enucleation of the tumor from the surrounding tissue may facilitate local recurrences hence it is necessary that the lesions should have wide margins. Rarely malignant transformation of benign FH is seen[13].

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