

Transcutaneous anterior orbitotomy surgical approach to dissect orbital lipoma: A rarest case report

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Abstract

A multitude of benign and malignant tumors can occur in the orbit. The ordinary lipoma is most common benign tumor in mesenchymal origin and differentiate into adipose tissue. The differential diagnosis of these rare form of lipoma are made, however CT & MRI allows a specific diagnosis to be made in all cases of rare location of lipomas. We reported a case of primary orbital lipoma in a 16-year-old male patient presented with a painless swelling over right upper eyelid. The mass was pathologically diagnosed as a benign lipoma. The anterior orbitotomy surgery was performed and followed by postoperative recall. We highlighted the role of MRI findings in the tumor diagnosis and surgical procedure for dissection of tumor.

Keywords: Orbital lipoma, Anterior orbitotomy, Swelling, Eyelids, Retroorbital space

Introduction

Lipoma is a non-cancerous/ benign tumor arising from fat cells of adult type and mature fat cells. The typical lipoma is soft, rubbery lump located just beneath the skin. They are slow growing and usually painless, being subcutaneous swelling it is a freely mobile. Lipoma could be a single, multiple and rarely non-capsulated and sometimes painful¹.

Although lipoma can occur at any age, they most often appear between the age of 40-60 years. They are most common soft tissue tumors found in adults. They occur more often in males than females. Lipoma usually do not often change, their form and have very little potential for malignancy¹.

Case Report

A 16-year-old male presented with complain of progressive painless swelling of the right upper eyelid since two months (Fig. 1). Imaging performed at the PBM hospital in Bikaner revealed a well-defined nodular lesion of size approx. 18X23X20 mm seen superomedial to right eye globe reaching upto medial canthus and in retroorbital space with internal fat density and peripheral hypodensity (Fig. 2). Underlying bones appear to be normal. Clinically, the patient was in good physical conditions and had no visual defects. Both eyes movements were normal. The massive mucilage mass with capsule or clear border was identified during surgery. In surgical procedure (Transcutaneous Anterior Orbitotomy) under general anesthesia, a skin crease incision given in upper eyelid is marked with marker. A traction suture is placed and fixated to the drapes with an artery forcep, Then orbicularis oculi muscle were incised with help of Radio frequency cautery (Fig. 3). The orbital septum is opened and a Jaffe eyelid retractor is placed and lesion are dissected and removed (Fig. 4) then sent for histopathological report then two layer suturing are done

with corrugated drain for discharge at surgical site (Fig. 5) and hemostasis is obtained, then topical antibiotics is applied to the wound and pressure dressing were done. No further therapies were continued postoperatively for long time.

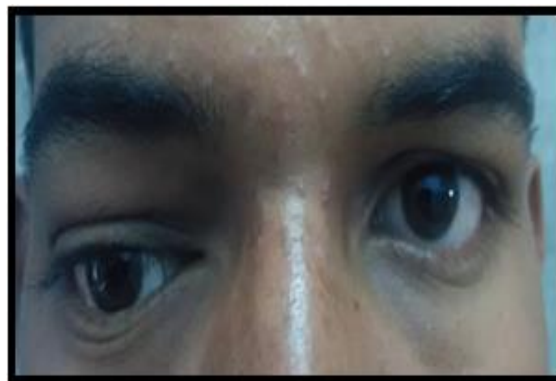


Fig. 1: Shows the swelling of the right upper eyelid

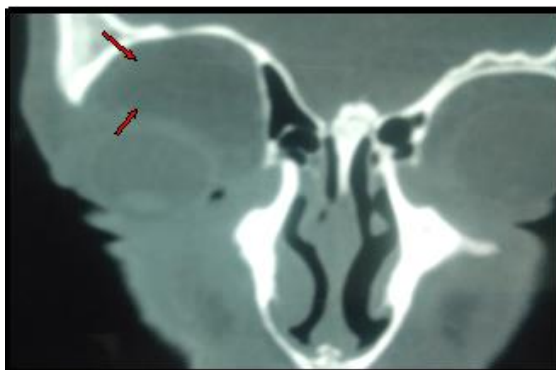


Fig. 2: Shows the well-defined nodular lesion of size approx. 18X23X20 mm seen superomedial to right eye globe reaching upto medial canthus and in retroorbital space



Fig. 3: Shows the traction suture placed and incised orbicularis oculi muscle and removed growth

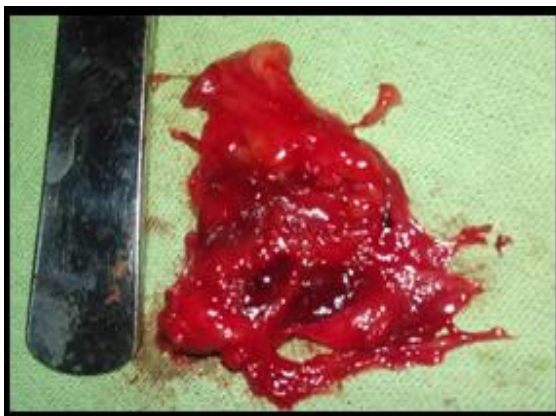


Fig. 4: Shows the growth were dissected and removed



Fig. 5: Shows the two layer suturing were done with corrugated drain for discharge at surgical site

Discussion

Orbital lipoma is difficult to distinguish histologically from normal adipose tissue, unless it is well encapsulated. Herniated orbital fat is itself relatively rare. The fat is freely movable and indents easily, and can be repositioned into the orbit, although it may be more prominent by retropulsion of the globe². In the present case, the excised tumor was encapsulated,

but we observed intraoperatively that there was no continuation of the tumor to the orbital fat and the tumor was non-movable. Thus, the excised mass was differentiated from herniated orbital fat and the tumor was diagnosed as a primary orbital lipoma.

Dermolipomas consist of adipose tissue, bundles of dense collagen, and hair follicles covered with keratinized and non-keratinized stratified squamous epithelium³. In the present case, the tumor excised from below the orbicularis oculi muscle consisted of mature adipose tissue, without evidence of dermal appendages, and thus was diagnosed as a lipoma.

The present case show the orbital lipoma resected by transcutaneous anterior orbitotomy surgical procedure. This surgical procedure are used for the incisional and excisional biopsy of anterior orbital lesions, for the biopsy of more posteriorly placed orbital lesions and for the drainage of hematomas/abscesses⁴.

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