CASE REPORT

Lacrimal Sac Pseudotumor - A Case Report

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ABSTRACT

Lacrimal sac tumors are rare with a clinical presentation that typically mimics chronic dacryocystitis. A full history with clinical and diagnostic workup is essential to plan treatment. Herein, we report the case of a 50-year-old woman with inflammatory pseudotumor of the lacrimal sac confirmed by histopathological section.

Key words: Dacryocystitis, epiphora, lacrimal sac tumors

INTRODUCTION

A patient presenting with chronic epiphora and mass in the medial canthal region can be due to many causes, most commonly being chronic dacryocystitis. It is usually associated with inflammatory signs, purulent discharge, and a soft, fluctuant mass typically below the medial canthal tendon. Persistent epiphora with an irreducible mass above the medial canthal tendon should arouse the suspicion of a tumor. Early diagnosis and ancillary investigations are important to rule out malignancy as they are locally invasive and life-threatening.

CASE REPORT

A 50-year-old Indian woman presented to our Eye Department at Dr. Radhakrishnan Government Medical College, Himachal Pradesh, India, in June 2018 with a 6-month history of epiphora and swelling at the medial canthal area of the left eye. There was no history fever or any mucopurulent discharge from the eye. There was no history of trauma or infection previously. The patient had already taken course of topical and systemic antibiotics at a local hospital with no relief of symptoms.

Her best-corrected visual acuity was 20/20 in both the eyes. There was a protrusion superior to medial canthus and a firm, non-tender mass was palpable at the medial side of the left orbit [Figure 1]. It was 3 cm × 2 cm in dimensions extending above and below the medial canthal tendon. There was mild erythema overlying the swelling. There was no displacement of globe. On lacrimal syringing test of the left eye, reflux of fluid was seen through the opposite punctum. Syringing test of the right eye was patent. Pressure over the mass did not cause regurgitation of contents through either punctum. Anterior segment and fundus examination were normal. Endoscopic endonasal examination demonstrated normal nasal cavity and no bulge in the lateral wall.

A computed tomography (CT) imaging identified a well-defined lobulated hyperechoic mass lesion in the left lacrimal sac fossa region measuring 30 mm × 18 mm. No involvement of extraocular muscles, bony erosion, or globe infiltration was seen [Figure 2].

General physical and systemic examination was normal. Routine blood and urine investigations were normal. Chest X-ray and ultrasound abdomen were normal.

The patient underwent excisional biopsy of the mass, lacrimal sac, and proximal portion of the nasolacrimal duct.

The surgery was performed under local anesthesia with sedation. Skin incision was made 3 mm from the medial

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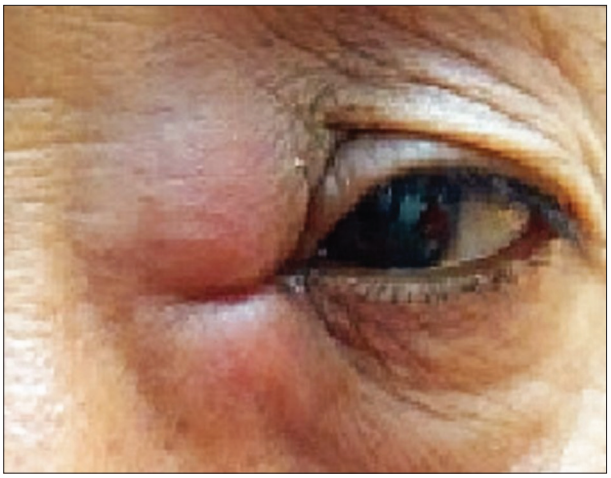

Figure 1: Pre-operative photograph of the 50-year-old female patient showing swelling at the left medial canthus

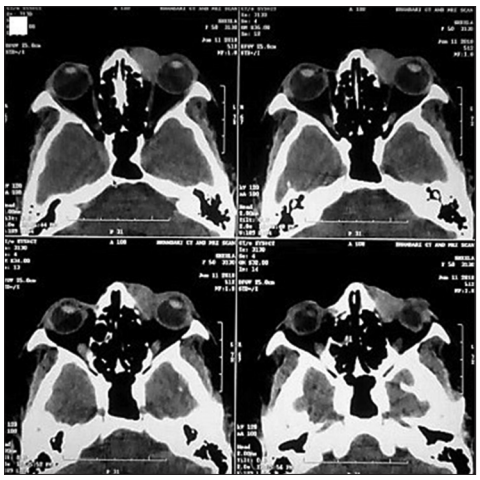

Figure 2: Pre-operative computed tomography scan of the orbit showing a well-defined 3 cm mass in the left lacrimal sac region

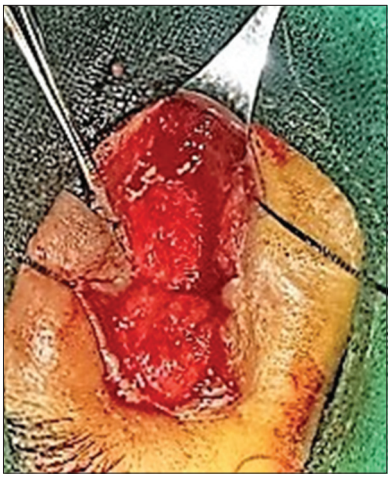

Figure 3: Intraoperative photograph of the patient showing the well-defined mass after blunt dissection

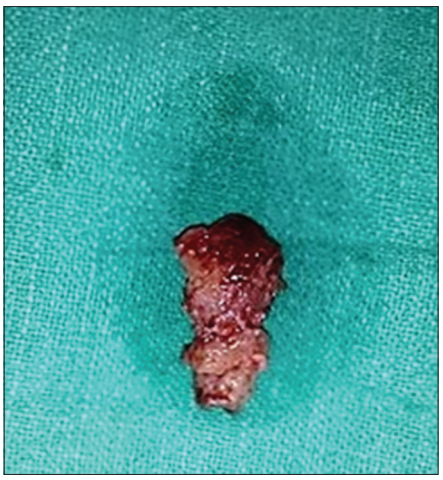

Figure 4: Excised mass was dumbbell shaped and measured 2.5 cm × 1.3 cm × 1 cm

canthus and was extended 1 cm above and 2 cm below the medial canthus. Blunt dissection was done, Medial canthal tendon was identified and divided. A solid, well-circumscribed dumbbell-shaped mass was seen without any infiltration to the surrounding structures [Figure 3]. It was then separated from the surrounding structures by blunt dissection followed by cutting its connections with the canaliculi [Figure 4]. Wound was closed with interrupted sutures. Pathologic examination demonstrated a solid gray-brown mass composed of mixed inflammatory cells such as lymphocytes and plasma cells. 1-month post-surgery, the patient underwent repeat CT scan and no mass was seen.

DISCUSSION

Lacrimal sac tumors typically present with epiphora and a palpable mass over the medial canthus and are thus often misdiagnosed as chronic dacryocystitis.[1] A full history with clinical and diagnostic workup is essential to plan treatment. Tumors of the lacrimal sac can be divided into pseudotumors and true tumors. Pseudotumors include mucocoele, granulomatous disorder, non-specific inflammatory disorder, and amyloidosis.[2] Lacrimal sac malignancies are quite rare and are further divided into primary and secondary tumors. Primary tumors can be epithelial, lymphoproliferative, mesenchymal, or melanotic in origin. Most tumors are primary and of epithelial origin (60–94%), of which about 55% are malignant. The most common primary neoplasm of lacrimal sac are epithelial tumors, squamous cell papilloma, and squamous cell carcinoma.[3,4]

It is important to rule out malignancy in any patient presenting with persistent epiphora with a mass above medial canthal tendon, globe displacement, and/or history of bloody tears.[5]

Workup of a patient with suspected lacrimal sac tumor should include an orbit CT scan and tissue biopsy. Definitive diagnosis is made on the basis of histopathological examination.[6]

In this case, the diagnosis of pseudotumor was made after exclusion of neoplasm infection and systemic disorders. The patient was managed with an open dacryocystectomy and a favorable post-operative outcome was seen.

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