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A Rare Case Of Lacrimal Gland Abscess Of The Orbit In 10-Year-Old Girl Its Management

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Abstract

Purpose: To describe a rare case of lacrimal gland abscess.

Methods: Case report.

Results: An 10-year-old girl presented acutely with an enlarging, painful mass in the superotemporal fornix in her left eye associated with S shaped ptosis. Clinical examination and contrast enhased computerized tomography scan of the orbit suggested a lacrimal gland abscess. Conjunctival swab and sputum grew Methicillin restant Staphylococus pneumonia. The child was treated with culture sensitive intravenous antibiotics and got improved.

Conclusions: Lacrimal gland abscess is a rare clinical entity. It can be treated conservatly with antibiotics and surgical with incision and drainage.

Keywords: Dacryoadenitis, MRSA associated suppurative Dacroadentis, Lacrimal gland abscess, Lacrimal gland infection, S shaped ptosis

Introduction

Dacryoadenitis means inflammation of the lacrimal gland. Lacrimal gland abscess is a rare entity of the orbit. The inflammation can be both infectious or non infectous in nature. Bacterial dacryoadenitis is a rare condition and suppuration leading to abscess formation within the lacrimal gland has been rarely reported in the literature [1, 2, 3, 4].

Pyogenic lacrimal gland abscesses are uncommon and thus may not be immediately clinically recognized without a high index of suspicion. We present a unilateral case of lacrimal gland anscess in a 10 year old girl. It was associated with ptosis and extra ocular movement restriction. Lacrimal gland pouting was seen along with discharge. Computerized tomography scans suggested enlarged lacrimal glands with rim-enhancing lesions. Conjuctial swab showed MRSA. There was complete resolution after culture responding intravenous antibiotics were given.

Case report

A 10 -year-old girl presented to Ophtalmology OPD of NSCB District Hospital with complaints of progressive painful swelling in left superior temporal fornix which was asscotated with ptosis and diplopia fro 3 days. Fig (1a) The child had left eye conjunctival redness along with discharge from last 7 days. There was no history of fever, malaise, cold and cough. There was no history any previous systemic illenss. At presentation the child was afebrile with normal vitals. Visual acuity was 6/6 in both eyes with normal color vision. There was no relative afferent pupillary defect. Intraocular pressure by Goldman aplation tomnometer was

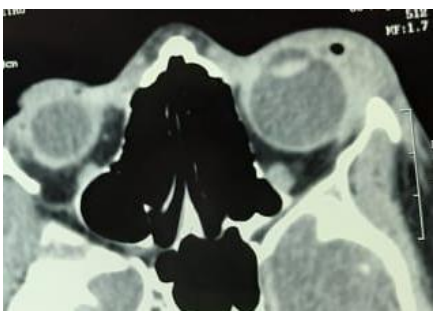
normal.The swelling was tender associated with redness and discharge, in the superotemporal fornix with normal appearance of the lacrimal gland ductules(fig 1b). She was diagnosed with acute dacryoadenitis. Conjunctival swab from the superotemporal fornix and sputum were sent for culture and sensitivity. Blood test shows increased total leucocytes(14.0 x 10^9/L). Rest of her blood reports were normal including HIV, montoux, ESR CRP. Pediatrics consultion was also taken for any immunodeficeiency which doesn't revealed any abnormality. The child was started on empirical oral antibiotics and topical tobramycin 0.3% four times a day.

Computed tomography (CT) of the orbits was done and it revealed an enhancing bulky left lacrimal gland with enhancing componets (56hu) anf fluid component, suggestive of Left dacrocystis with abscess (Fig 2). Usg orbit does not reveled any cyst ruling out cysticercoisis. Clinical history and CT were consistent with the diagnosis of lacrimal gland abscess. Upon re-examination there was no improvement in the syptoms after 5 days. The culture report revealed MRSA which was sensitive to tetracyclin. Appropriate antibiotics were started after consulting pediatrician, there was improvement in the symptoms afger starting of culture sensitive antibiotics. Antibiotics were given for 1 week till the total improvement of symptoms.(Fig 3a, 3b). The child was followed up to 6 months. No sequela of dry eyes were noticed.

Figure 1a shows Left upper eyelid shows S shaped ptosis

Figure 2a retraction of left upper eyelid shows swelling in palpebral region

2a(CECT Axial section)



2b(CECT Coronal Section)

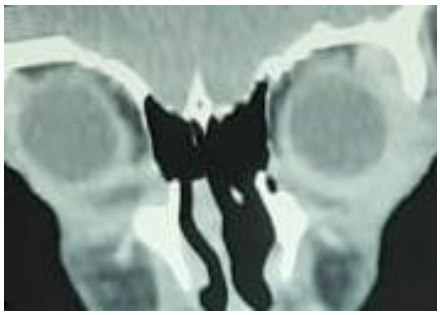


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Figure 2a,2b shows Axial CECT and Coronal section of CECT scan demonstrating a enhancing bulky left lacrimal gland with enhancing componnets(56hu) and fluid component, suggestive of Left dacrocystis with abscess.

Fig 3a **Fig 3b**

Figure 3a , 3b resolution of ptosis and swelling after antibiotic course of 7 days

Conclusion

The pyogenic lacrimal gland abscesses are very rare entity but diagnosisng these are of very much clincal significance as in many cases when the abscess is not treated well or missed this may progress to more widespread and life threatning conditions such as cavernous sinus thrombosis intracranial abscess, meningits.[4] In case of suspison help of radiological imaging should be taken. CECT is important tool in determing the extent and nature of the disease.[5] Though most of the abscess responds to culture sensitive antibiotics, surgical management can be required in no responding cases. So a close observation is warranted.

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