IJIRR

International Journal of Information Research and Review
Vol. 04, Issue, 08, pp.4464-4465, August, 2017

CASE REPORT

CASE REPORT -ORBITAL TUBERCULAR DACRYOADENITIS

***[1]Nishant Vardhan and [2]Mandeep Tomar**

[1]Civil Hospital Jubbal Shimla H.P. India
[2]Senior Resident RPGMC TANDA

ARTICLE INFO

Article History:

Received 22nd May, 2017
Received in revised form
19th June, 2017
Accepted 26th July, 2017
Published online 30th August, 2017

Keywords:

Tuberculosis,
Lacrimal gland,
Histopathology.

ABSTRACT

A 18-year-old male patient presented with a history of painless, progressive swelling on the left side of the face of 3 months duration. On examination, fullness along the right lateral orbital rim with ptosis (especially laterally) Ocular movement was normal. His BCVA was 6/6 in both eyes.]. A firm, non-tender mass was palpated in the temporal orbit. There was no associated discharge or redness, and the mass was not warm or fluctuant. Slit lamp, fundus and intraocular pressure evaluations were normal in both eyes. Computed tomography (CT) of the orbits revealed a well-defined lytic lesion along the lateral orbital wall with central sequestrum and associated.

Background: Orbital tuberculosis is rare even in endemic areas. The disease may involve soft tissue, lacrimal gland, or the periosteum or bones of the orbital wall.

Case: We present an Indian male, who presented with a slowly growing right-sided inferolateral orbital mass, with no significant previous medical history. A tuberculin skin test was strongly positive. Incisional biopsy showed caseating granuloma and Langhan's giant cells suggestive of tubercular aetiology. The patient responded well to tuberculous chemotherapy.

Conclusion: Although tuberculous dacryoadenitis is a very rare manifestation of tuberculosis,still the possibility should be entertained in a slowly growing mass of the lacrimal gland, especially in developing countries where the prevalence of tuberculosis is high.

INTRODUCTION

A 18-year-old Indian male presented to the eye OPD with a slowly-progressive swelling of the left upper eyelid of three months duration. This was associated with mild pain.There were no known systemic disease, loss of appetite or loss of weight, exposure to tuberculosis. Her unaided visual acuitywas 6/6 in both eyes. The right eye examination showed lateral ptosis with an S-shaped deformity of the lid [Fig.1]. A firm, non-tender mass was palpated in the temporal orbit. There was no associated discharge or redness, and the mass was not warm or fluctuant. The ocular movement was normal. On CT Orbit peripherally enhancing abscess with minimal periosteal reaction suggestive of osteomyelitis (FIGURE-2).A blood test demonstrated Hb-10.4 gm/dl, leucocytes - 6500cells/cu mm, ESR 50 mm in 1sthour. The tuberculin skin test was strongly positive (14/14 mm). The Sputum was negative for acidfast bacilli and culture for tuberculosis. Chronic granulomatous inflammation with caseation necrosis was seen on histopathology Although the Gomori methenamine silver (GMS) staining, acid fast bacilli (AFB) staining and culture for *Mycobacterium tuberculosis* (MTb) were negative, PCR was positive for MTb. He was started on antitubercular therapy (ATT).

****Corresponding author: Nishant Vardhan,***
Civil Hospital Jubbal Shimla H.P. India

At the last follow-up, the lesion at the lateraorbital was completely resolved.

DISCUSSION

The chronic inflammatory lesions involving the orbit are usually of unknown aetiology. Clinically, these lesions may be mistaken for neoplasm and may simulate a pseudo tumour. Most of these inflammatory reactions are non-granulomatous. Truly granulomatous lesions rarely involve the orbit and tubercular involvement is particularly very rare (Suneetha *et al* 2000). The presenting symptoms of tuberculous dacryoadenitis are usually a painless swelling of the eyelid, mimicking a benign, mixed tumour of the lacrimal gland. There may be periostitis of the orbit. It is mostly found years after the resolving of a pulmonary or lymph node tuberculosis (Van Assen *et al* 2002). Pyogenic bacteria such as staphylococcus aureus and streptococci are the most common causes of acute dacryoadenitis; however, in such cases, the presentation is more fulminant, the symptoms are of shorter duration and the patient is usually systemically toxic. Nevertheless, suspicion of this organism must be entertained as the treatment is different from that of a tubercular aetiology. Chronic infections of the lacrimal gland occur in tuberculosis, syphilis, leprosy and schistosomiasis (Van Assen *et al* 2002).The spread of M. tuberculosis to the lacrimal gland is thought to be mainly

haematogenous. Spread tothe lacrimal gland also occurs directly from primary conjunctival tuberculosis (Bansal *et al* 2006). Involvement of the lateral wall of the orbit suggests a haematogenous source of infection (Narula *et al*., 2010).

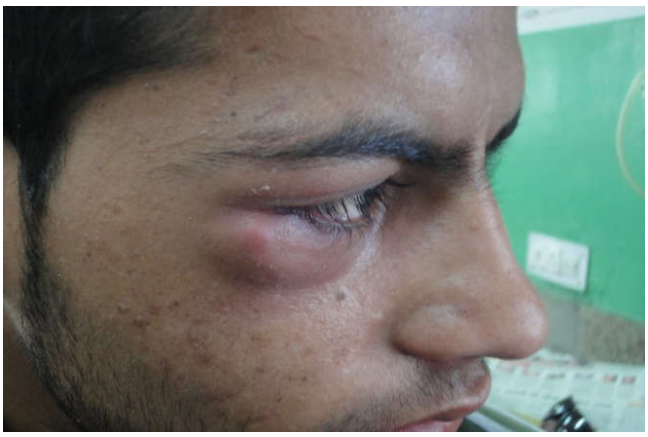

Figure 1.

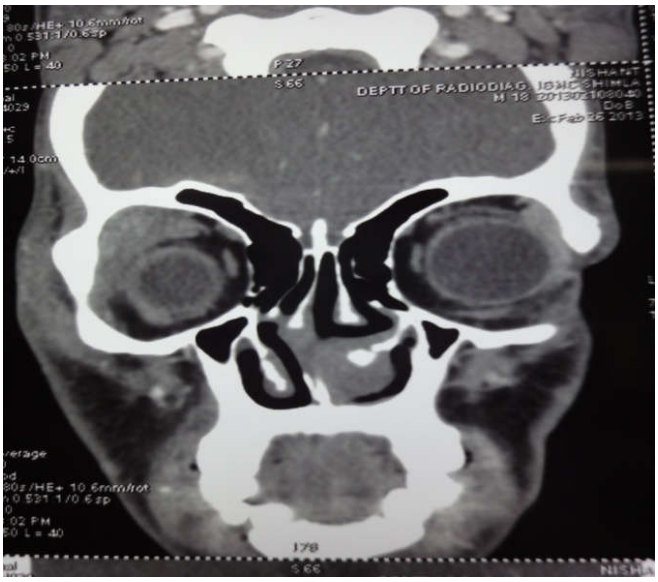

Figure 2.

The acid-fast bacilli may lie dormant in the lacrimal gland and become reactivated later when the body's resistance decreases (Bansal *et al* 2006).

In our patient, the lacrimal gland involvement was probably of haematogenous origin. Isolation of M.tuberculosis is required for the definitive diagnosis, but positive culture from lacrimal gland secretions or from fine needle aspirations are extremely rare. We believe that the differential diagnosis in patients with enlargement of the lacrimal apparatus should also include tuberculous dacryoadenitis, especially when originating from endemic areas. The systemic history of the patient, including past history of exposure to tuberculosis suggestive of pulmonary tuberculosis and nutritional status, should be completely evaluated in patients with lesions suggestive of tubercular aetiology. The diagnosis and management of these lesions depend on the close coordination of the ophthalmologist, microbiologist, pathologist, radiologist and physician. The treatment of these lesions is highly successful, without any sequelae, provided prompt ATT is instituted.

REFRENCES

Bansal R K, Malhotra C, Bhatia Rozi, Chhabra S,Sood S. 2006. Tubercular dacryoadenitis – a case report and review of literature. *Indian J PatholMicrobiol*; 49:385-7.

Madhukar K, Bhide M, Prasad CE, Venkatramayya. 1991. Tuberculosis of the lacrimal gland. *J Trop Med Hyg;* 94:150-1.

Mortada A 1971. Tuberculoma of the orbit and lacrimal gland. *Br J Ophthalmol*; 55:565-66.

Narula M K, Chaudhary V, Baruah D, Kathuria M, Anand R. 2010. Pictorial essay: Orbital tuberculosis. Indian J Radiol Imaging; 20: 6-10.

Oakhill A, Shah K J, Thompson A G, Stokes M J, Mann J R 1982. Orbital Tuberculosis in Childhood. *Br J Ophthalmol*; 66:396-7.

Schmoll C, MacRae M, Mulvihill A, Murray R, Cunningham, S, McKenzie, K. 2009. Tuberculous dacryoadenitis in a Scottish teenager. *Br J Ophthalmol*; 93:137-8.

Sen D K. 1980. Tuberculosis of the orbit and lacrimal gland: a clinical study of 14 cases. *J Paediatr Ophthalmol Strabismus;* 17: 232-8.

Suneetha N, Battu RR, Thomas RK. 2000. Orbital abscess: Management and outcome. Indian *J Ophthalmol*; 48:129-34.

Van Assen S, Lutterman J A. 2002. Tuberculous dacryoadenitis: a rare manifestation of tuberculosis. *Neth J Med;* 60:327-9.

****