Original Research Paper

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Otolaryngology

UNUSUAL PRESENTATION OF TUBERCULAR OTITIS MEDIA

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ABSTRACT A 22 years old female presented to our OPD with complaints of swelling in the left post aural area since1month, associated with pain.Previous episode of ear discharge was present.No history of trauma,hard of hearing,aural fullness.No history of any surgeries.On examination there was a diffuse,tender,fluctuant swelling seen in the left post aural area.There was a smooth polypoidal mass filling the left external auditory canal which is insensitive to touch,did not bleed on touch,probe can be passed all around except posteriorly and superiorly.Tympanic membrane not visualized.Facial nerve function was normal.Computed tomography scan of temporal bone shows soft tissue density involving external auditory canal,middle ear cavity,mastoid air cells with adjacent bone thinning and erosions.Incision and drainage was done for left post aural abscess followed by modified radical mastoidectomy with ossiculoplasty in another sitting.Granulations tissue was sent for Histopathological examination.Histopathological examination showed tuberculous granulation tissue.Patient was started on antitubercular treatment.Patient was under follow up.

KEYWORDS : Tuberculous otitis media,granulation tissue,anti tubercular treatment.

INTRODUCTION:

Tuberculosis is one of the major infectious disease with predominant involvement of lung and lymph node but tuberculosis of middle ear is uncommon.Primary tuberculosis of the ear has been rarely reported and the disease is usually secondary to infection in the lung,larynx, pharynx, nose[1,2].Incidence of TB otitis media has been reported as 0.04-0.9% in developed countries[3].

Here we are presenting a case of unusual presentation of left tubercular otitis media with post aural abscess and aural polyp from our institution.

CASE REPORT

History:A 22 years old female presented to our OPD with complaints of swelling in the left post aural area since 1month, associated with pain and decreased hearing.There was no history of ear discharge,aural fullness, fever,trauma.There was no history of ear surgery in the past and no history of tuberculosis in family or TB contact.

Examination:On physical examination,there was no anaemia, lymphadenopathy or any other abnormality.On local examination of left ear there was a diffuse,partially fluctuant,tender swelling in left post auricular area measuring 2 x 3cm,with local rise of temperature,post auricular groove was obliterated.On otoscopy there was a smooth,pale pink polyp filling the left external auditory canal,which is insensitive to touch,did not bleed on touch,probe can be passed all around except posteriorly and superiorly.Tympanic membrane not visualized.Facial nerve function was normal.Tunning fork tests -Rinne's negative on left side,Weber lateralized to left ear,ABC same as examiner ear.

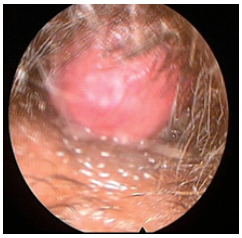

Fig.1 polyp filling the left external auditory canal

On local examination of right ear,nose, oral cavity and pharynx were normal.A provisional diagnosis of left chronic otitis media with aural polyp and postauricular abscess was made.

Investigations:Pure tone audiometry showed left ear mild conductive hearing loss.Routine blood tests were normal except ESR which was 40mm in 1st hr.Chest x-ray was normal.Xray mastoids (Law's lateral oblique view) showed clouding of left mastoid air cells.CT scan of temporal bone shows soft tissue density involving left external auditory canal,middle ear cavity, mastoid air cells with adjacent bone thinning and erosions .

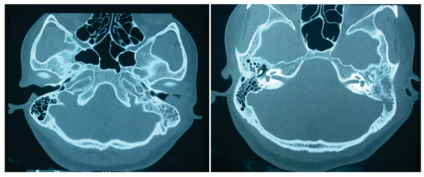

Fig.2 HRCT temporal bone showing soft tissue density involving left external auditory canal,middle ear,mastoid air cells with adjacent bone thinning and erosions

Treatment:Incision and Drainage was done for left post aural abscess under local anesthesia on 24/7/2018.Pus drained out and sent for culture and sensitivity.Necrosed muscle removed.Outer cortex of mastoid found eroded at three sitesfrom which pale granulations tissue seen coming out.Culture and sensitivity of the pus sterile.Modified radical mastoidectomy was done under general anaesthesia on 1/8/2018.Intra-operatively, Pale granulation tissue were seen eroding posterior bony meatal wall and extending to EAC presenting as polyp.Granulations,necrotic bone and pus were seen filling attic, antrum and mastoid extending to involve the mesotympanum and hypotympanum ,which were removed.Tympanic membane intact and bulged out. All the ossicles were intact.Malleus head and incus were removed.Refashoined incus kept between membrane and stapes head.Canal obliteration done with temporalis muscle.Necrosed muscle removed.

In view of the operative findings, granulation tissue and bony sequestrum was sent for histopathology and microbiological examination for AFB stain and culture.Suture removal was done on post op day 7 (7/8/2018).There was a gaping of suture wound ,all sutures were given off.There was a necrosis of muscle,all the gel foam

melted out.Regular dressings were done.

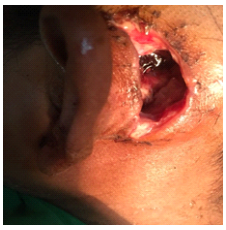

Fig.3 post op day 7

Histological examination of the resected material revealed the presence of a tuberculous granuloma with caseous necrosis with numerous acid fas bacilli.ZN stain for AFB was positive.

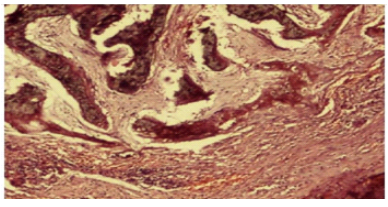

Fig.4 Histological picture showing tubercular granuloma with caseous necrosis with numerous acid fast bacilli

After biopsy report patient was subjected to Mantoux test,two sputum smears, CBNAAT of sputum which were negative for acid fast bacilli,to rule out pulmonary foci.So the diagnosis of left sided primary tubercular otitis media with post aural abscess was made.After biopsy report patient was started on ATT in consultation with TB specialist.After taking ATT for 15 days patient showed a dramatic response with shrinkage of the post aural wound with healthy granulations.Secondary suturing done under LA on 22/8/2018.Suture removal done on7th day.Post op wound healed well.Patient was under follow up.

Fig 5 post op day 7 after secondary suture removal

DISCUSSION:

The classical description of tuberculous otitis,reported in literature, includes painless otorrhea, facial palsy and multiple perforations[4,5,6,7,]. Contrary to this classical description,in our case there was no evidence of otorrhea ,facial paralysis, and any perforation was observed. However,our patient presented with post auricular abscess,decreased hearing,polyp in the EAC.

In this case no primary focus could be found.Intraoperative findings are typical of tuberculosis. Disease was confirmed based on histopathology and AFB staining.A study by Windle taylor reports 20/22 cases to be histologically positive and histology was considered as a diagnostic tool,which supports our study [8].Early institution of ATT is mandatory and is the main stay of treatment especially to avoid serious complication.Surgery is required for tissue sampling and for clearance of the disease .

CONCLUSION:

Tuberculous otitis media is often missed as the classical triad of painless otorrhoea, multiple perforations and facial palsy are not seen in all cases of TBOM.The absence of these should not stop the clinician from diagnosing the disease.Suspicious tissue should therefore be tested properly—to avoid missing the diagnosis and to prevent any complications.

REFERENCES:

1. Mahajan M,Agarwal DS,SINGH NP,Gadre DJ.Tuberculosis of the middle ear:A Case report.Indian J Tuberculosis. 1995;42:55.
2. Skolink PR,Nadol JR,Jr Baker AS.Tuberculosis of the middle ear:Review of literature with an instructive case report.Rev Infect Dis. 1986;8:403-10.(PubMed)
3. Weiner GM, O Connell JE, Pahor AL. The role of surgery in tuberculosis mastoiditis:
4. Duclos JY, Darrouzet V, Ballester M, Bebear JP, Bebear CM (1999)Tuberculose de l'oreille moyenne ; Encycl Med Chir (Elsevier,Paris), Otorhino- laryngologie, 20-235-A-10, 4 p.
5. Hamouda S, Opsomer H, Delattre A, Thumerelle C, Flammarion S, et al. (2008)Tuberculous otitis media. Med Mal Infect 38: 608-611.
6. Singh B (1991) Role of surgery in tuberculous mastoiditis. J Laryngol Otol 105:907-915.
7. Vital V, Printza A, Zaraboukas T (2002) Tuberculous otitis media: A difficult diagnosis and report of four cases. Pathol Res Pract 198: 31-35.
8. Windle-Taylor PC;TUBERCULOUS OTITIS MEDIA:a series of 22 patients,Laryngoscope 1980.