

A dragging Externotitis Hiding Tuberculosis of the External Ear

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Abstract

Tuberculosis of the ear is rare; we report the case of an 86-year-old patient, followed for a dragging otitis resistant to local and general treatment whose clinical picture mimicked malignant extern otitis but during the biopsy of the polyp of the external auditory canal revived the diagnosis.

Keywords: Tuberculosis of the ear, extern otitis, polyp, antibacillary treatment.

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INTRODUCTION

Tuberculosis of the ear is a rare pathology. The clinical picture is often comparable to that of a common chronic otitis, and bacteriological examinations are rarely positive, which makes diagnosis difficult and delays.

The presence of an atrial localization in a multifocal tuberculosis chart is exceptional. We report the case of an 86-year-old patient, followed for dragging otitis resistant to local and general treatment whose clinical picture mimicked malignant otitis extern but during the biopsy of the polyp of the external auditory canal refrésed the diagnosis.

CLINICAL OBSERVATION

This is Mr. M.B aged 86 years diabetic without other particular history who presented to the ENT emergency room of CHR de guelmim for otalgia with feeling of full ear and hearing loss of the right ear which dragged two weeks before the consultation; the clinical examination at admission found an inflamed narrowed external auditory canal with the presence of an infallammé polyp that prevented the visaulization of the entire eardrum (image 1)

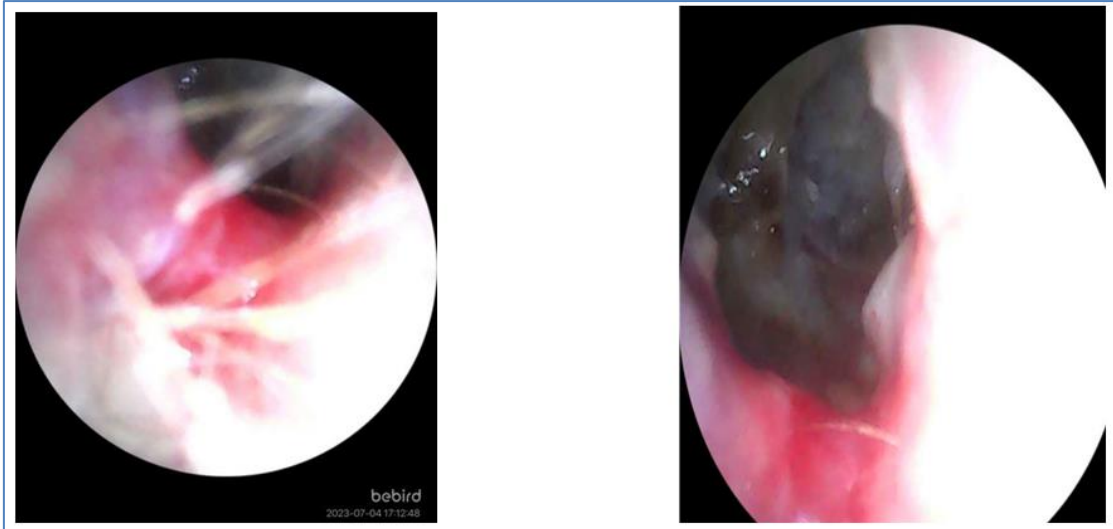
The patient did not have facial paralysis; vestibular examination and cranial pairs were normal.

The balance was copied by a biological assessment which showed a high sedimentation rate at 80 with a crp 221 with a normal blood count and an ionogram with a normal renal foction; a glyated hemoglobin at 9.1. The CT scan of the rocks returned in favor of light lysis of the tymanal bone with a thickening of the walls of the right CAE and case of the tyman ossicles and inner ear of normal appearance. (Image 2)

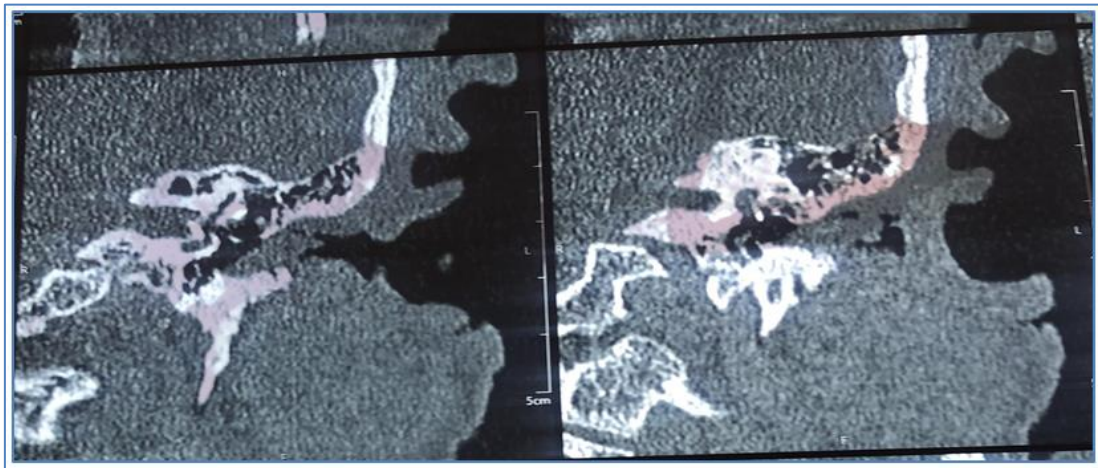
Our action was to put the patient on a local treatment based on drops made of combination of corticosteroids and antibiotics (Ciprofloxacin | Fluocinolone) and intravenous treatment (combination of 3rd generation cephalosporins and ciprofloxacin) with a diabetes monitoring scheme ;Monitoring for three weeks was marked by the persistence of the same otoscopic aspect with a fluctuation of pain; given this aspect, a biopsy of the polyp of the external auditory canal was performed, which the Anapath study returned in favor of tuberculosis (image 3).

Retroviral serology was negative in our patient.

The patient was put on antibacillary treatment with local treatment the evolution was marked for three months by the slow regression of inflammatory signs (image 4) with clinical-biological improvement.



Picture 1: showing otoscopic initial appearance



Picture 2: CT sections showing filling of the duct by polyp and lysis of the tympanum

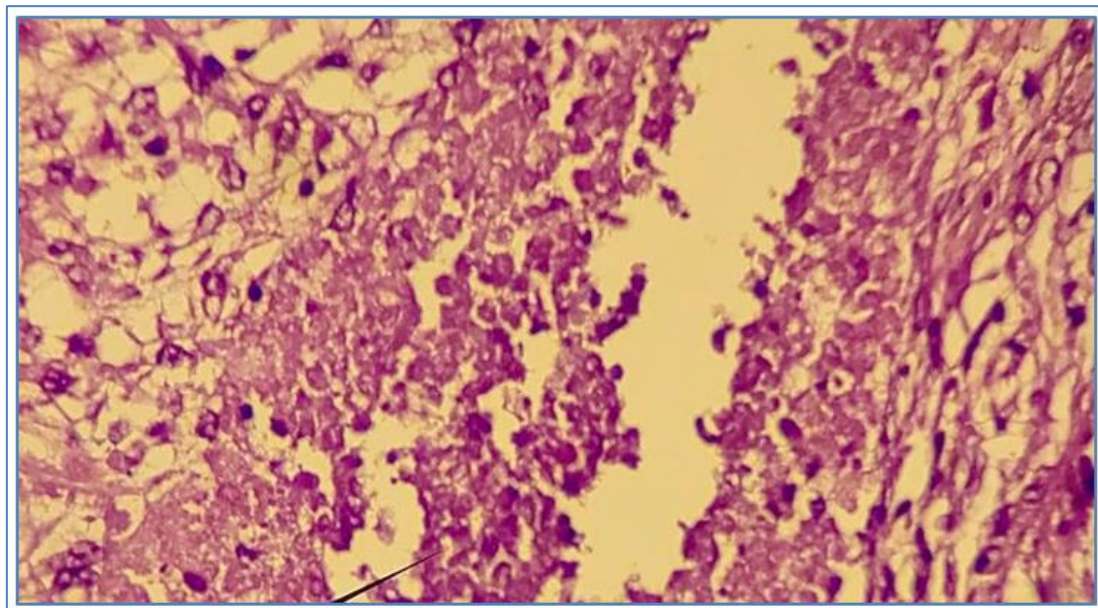


Image 3: of the room showing caseous necrosis

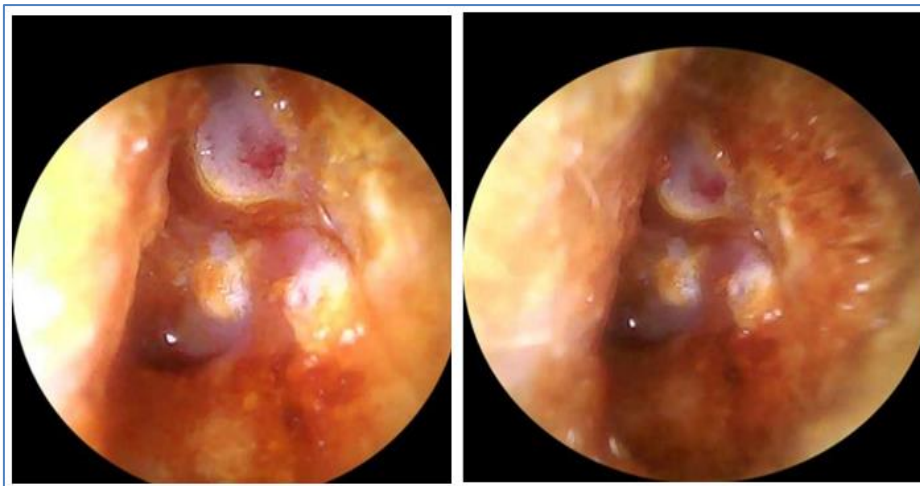


Image 4: Amount the evolution of the endoscopic appearance under local and general treatment by antibacillary

DISCUSSION

Diffuse or multifocal tuberculosis accounts for 9 to 10% of extrapulmonary tuberculosis cases in the literature. However, this figure can increase and exceed 40% in tuberculosis-endemic areas. Ear tuberculosis is even rarer, less than 0.1% of all chronic otitis media, and its diagnosis is difficult. At our patient, the otoscopic aspects (polyp filling the EAC) and the images of the CT scan of the rocks evoked the following differential diagnoses: a cholesteatoma of the EAC, granulomatosis, a malignant tumor of the outer ear, necrotizing otitis externa and even syphilitic otitis [1- 4].

The suspicion of tuberculosis of the ear cannot be ruled out on the basis of a negative bacteriological examination of otorrhoea. Indeed, extrapulmonary lesions contain only a few bacteria 23 and cultures are positive in less than 50% of cases.

They are often contaminated by other germs, in 80% of proteus, streptococci, staphylococcus aureus and *Pseudomonas* [5- 9]. Pre-application of aminoglycoside-based ear drops, such as neomycin, may also alter the result of cultures. Histological and microbiological examinations of biopsies of the mucous membranes of the ear are more useful for diagnosis. PCR gene amplification, which consists of amplifying and detecting a specific nucleic sequence (polymerase chain reaction), allows diagnosis in less than two hours.

This is a specific technique but not very sensitive to crops. The sensitivity varies greatly depending on whether the samples are positive or negative on microscopic examination, the germs found in the otorrhea can interfere with the bacillus Koch.

Radiological examinations, including computed tomography of the rock, show only non-specific lesions of chronic otitis, without characteristic changes.

The only suggestive element of ear tuberculosis is that the mastoid appears well pneumatized in two-thirds of cases, while it is generally poorly pneumatized in case of chronic non-tuberculous otitis, with or without cholesteatoma. It can highlight perilymphatic fistulas by erosion of the otic capsule, at the level of the lateral semicircular canal, the ampulla of the upper canal, or the promontory as well as bone sequestrs. MRI does not provide more elements and is only useful in case of facial paralysis, showing an enhancement

As TOM occurs willingly in immunocompromised patients, an HIV test is recommended [8. 9], however, the CT-scan is useful for an assessment of lesions. Treatment is essentially medicinal, consisting of a combination of isoniazid, rifampicin, pyrazinamide and ethambutol, for a period of six to nine months.

Surgery is indicated for diagnostic purposes, for the removal of tissue for histological and bacteriological examinations or as a second line, after failure of medical treatment [6- 9].

CONCLUSION

The diagnosis of tuberculosis of the ear is often late due to the lack of a specific clinical picture compared to other forms of chronic otitis.

A history of tuberculosis, found in nearly 50% of cases, non-response to treatments, the presence of pale granulations in the cavities of the middle ear, a CT scan showing diffuse opacities in a well pneumatized temporal bone are all suggestive elements diagnosis.

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