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Case Report

Uncommon Presentation of Extrapulmonary Tuberculosis in a Child

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Abstract

Introduction*:** Primary tonsillar tuberculosis is exceptional even in endemic country like Morocco. the diagnosis was 'not evocable on clinical signs because of their non specificity, diagnosis made after surgery and histological analysis.no primary location been found on radiological pulmonary exam. ***Case report: Herein, we report the exceptional case of a primary tonsil tuberculosis discovered in a 12 years child .no specific local or general symptom was observed. confirmation made by histology. Actually, the child is doing well under therapy. ***conclusion***: primary tonsillar tuberculosis is exceptional, only histology can confirm the diagnosis. Thus, must make us keeping in mind this eventual diagnosis, particularly in pediatric population, every time symptoms are not specific.

Keywords: Tuberculosis, Primary, Tonsil, Child.

INTRODUCTION

Primary tuberculosis of the tonsils, in absence of pulmonary tuberculosis, is an uncommon condition rarely reported in the literature. Many reports were about association with miliary tuberculosis. We report a particular case of a 12 years old child with isolated tonsil tuberculosis discovered on histology examination of tonsillectomy. We would like to highlight this unexpected finding through this observation.

CASE PRESENTATION

A 12-year-old child, followed since the age of 10 for allergic rhinitis under treatment (nasal corticosteroid therapy, physiological saline), with no history of tuberculosis exposure, consults in pediatric department for recurrent tonsillitis with a history of night snoring and dysphagia.

Clinical examination revealed a child in good general condition, with good growth and weight development. Oro-pharyngeal examination noted enlarged erythematous tonsils and some dental caries. Bilateral sub-centimetric cervical lymphadenopathy was also noted, both in the submandibular region and along the cervical chain. Cardiovascular, pleuropulmonary, abdominal, and musculoskeletal examinations were unremarkable. Paraclinical investigations showed a slightly elevated erythrocyte sedimentation rate (ESR) of 38 mm/hour, a C-reactive protein (CRP) level of 52 g/dL, leukocytosis with a predominance of neutrophils, and a normal coagulation profile. Transthoracic ultrasound was also normal. Our therapeutic approach was to administer amoxicillin-clavulanic acid (80 mg/kg/day) to the patient for 8 days and to schedule a possible tonsillectomy, which was performed 15 days later without incident. The histopathological examination of the surgical specimen revealed findings consistent with tonsillar tuberculosis; Necrotising epithelioid Cell granulomas which showed positivity for AFB on ZN stain [figure A].

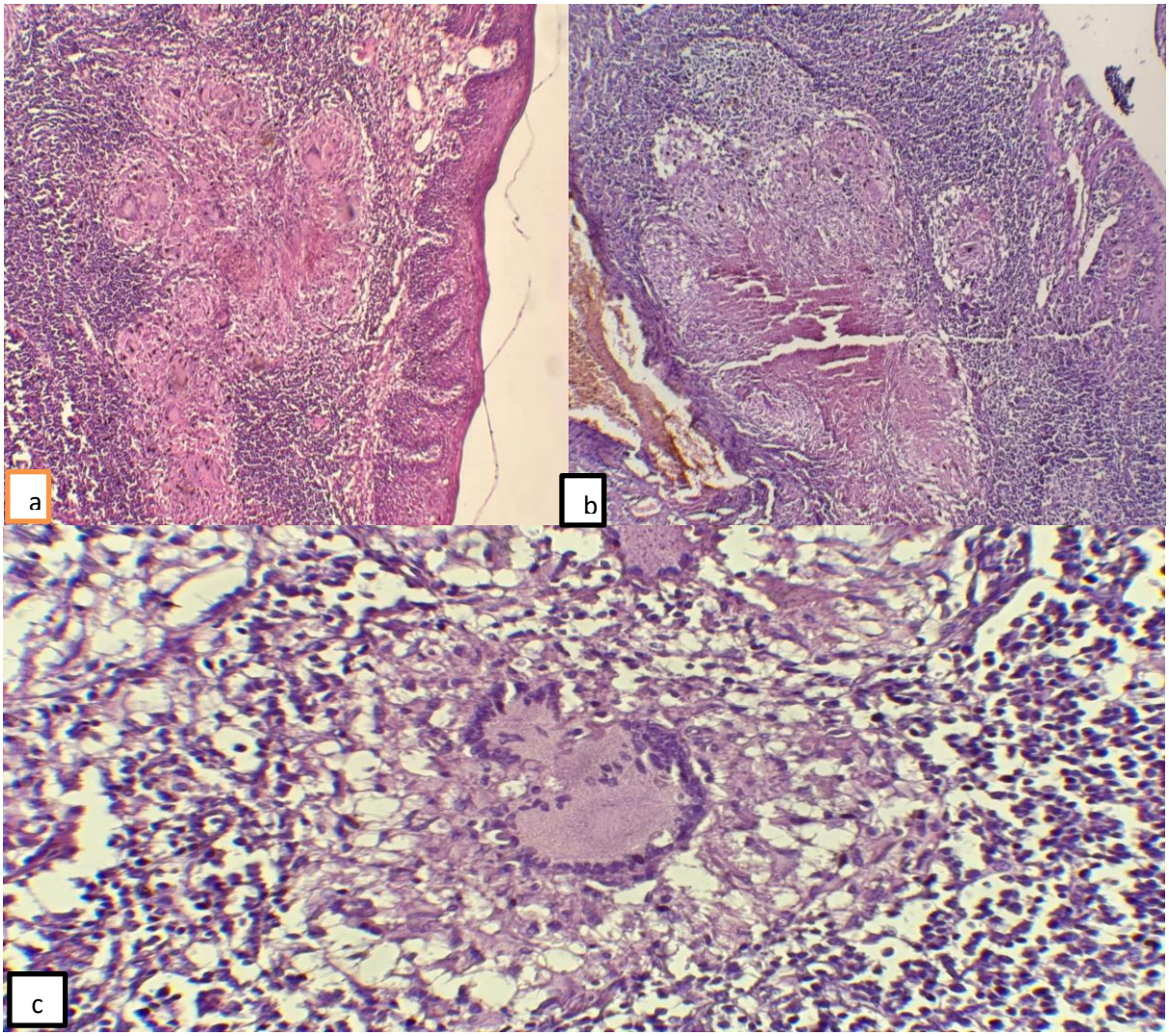

Figure A: Histology of the tonsils, Hematein-eosin staining: a+b. low power magnification: Well-defined epithelioid cell granulomas with Langhans-type of giant cells and caseous necrosis. C. High power magnification; Langhans giant cell specifically found in tuberculosis granulomas

The patient was then started on anti-tuberculosis therapy according to the following regiment: using four drugs: rifampicin, isoniazid, pyrazinamid, ethambutol during 6 months; RHZE (2 months) / RH (4 months), with a good clinical and biological outcome.

DISCUSSION

Primary tonsil tuberculosis was first described by DIEULAFOY IN 1895[1]. The tonsil location remains exceptional. CAPIO [2] estimated the incidence of tonsil tuberculosis at 2,2 per 100 000. Tuberculosis of the oral cavity is believed to be due to direct inoculation by infected sputum and inhaled infected droplet nuclei [3]. However, direct seeding of the tonsil by blood stream mycobacterial infection is possible, as reported by the discovery of coexisting miliary tuberculosis in a patient with tonsillar involvement [4].

Whatever the route of infection, it can be seen that primary tonsillar tuberculosis in the absence of pulmonary tuberculosis is quite rare; OZBAY [5] reported in his large retrospective-revew-Serie of histopathological analysis of 2000 tonsillectomy specimens, the finding of tuberculosis in only one patient.

Clinical symptoms are not specific and, like our case, could mimic simple tonsillitis. Patient can claim dysphagia with odynophagia [6]. examination can show tonsil enlargement, ulcerations, erythema, whitish spots and sometimes; lateral cervical adenopathy as in our patient [6,7]. Differential diagnosis include; carcinoma or metastasis, syphilis, Wegener granulomatosis, canker sores [8-10]. Biological parameters could be within the normal range, or revealing inflammatory syndrome. The chest skiagram can be normal as in our case. The sputum microbiological examination for acid-fast bacilli (AFB) can be negative by Ziehl Neelsen (ZN) technique. the analysis of the bronchi aspiration by classical microbiological technique or by PCR (polymerase chain reaction) may detect an eventual pulmonary infection.

The VIH serology is justified as immunodeficiency is usually associated with atypical localization of tuberculosis [11].

The histopathological findings of necrosing granulomas are a presumptive diagnosis, final diagnosis must highlight the tuberculosis germs; Mycobacterium tuberculosis as the most common germ, or atypical germs like M. Bovis or M. africanum [12].

The treatment was started on the regular four-drug anti-tuberculous therapy; rifampicin, isoniazid, pyrazinamide, ethambutol. The treatment period can last from 6 months, to 18 months for the sever forms. Our patient undergoes a period treatment of 6 months, with good outcome and negative tuberculosis search tests.

CONCLUSION

This case demonstrated an uncommon presentation of primary tuberculosis reminding us, as in an endemic country, to consider tuberculosis also as microbiological aetiology for tonsilitis.

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