



Journal Homepage: -www.journalijar.com

INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)

Article DOI:10.21474/IJAR01/14675
DOI URL: <http://dx.doi.org/10.21474/IJAR01/14675>



RESEARCH ARTICLE

CASE REPORT TONSILLAR TUBERCULOSIS SIMULATING A CANCER AND REVEALING MILIARY PULMONARY TUBERCULOSIS

A. Ftouhi, M. Moumni, N. Errami, B. Hemmaoui, M. Zalagh and F. Benariba

Department of Otorhinolaryngology, Head and Neck Surgery; Mohamed V Military Hospital. Mohammed V University in Rabat. Morocco.

Manuscript Info

Manuscript History

Received: 05 March 2022
Final Accepted: 08 April 2022
Published: May 2022

Key words: -

Tonsil, Tuberculosis, Miliary Pulmonary Tuberculosis

Abstract

Tuberculosis is an important cause of morbidity and mortality worldwide. We report the case of a 78-year-old man who presented with two months history of sore throat and left cervicallymphadenopathy without respiratory symptoms. Oral examination and the CT scan of the neck showed bilateral tonsillar hypertrophy simulating a cancer (lymphoma). Histopathology revealed granulomatous inflammatory lesions with caseation necrosis in the biopsies of tonsil and lymphadenopathy. The chest CT scan showed diffuse pulmonary micronodules related to miliary pulmonary tuberculosis. Anti-tuberculous medication was given and the improvement of symptoms was noticed in four weeks.

Copy Right, IJAR, 2022, All rights reserved.

Introduction:-

Tuberculosis is one of the most serious infectious problems in the world. Tuberculosis of the oral cavity is uncommon and tonsillar tuberculosis is one of the extremely uncommon forms of extrapulmonary tuberculosis [1]. Tonsillar tuberculosis could be either primary or secondary [2] and the association with miliary tuberculosis is exceptional. In our case, we describe a rare case of tonsillar tuberculosis without respiratory symptoms that simulated a cancer and revealed a silent miliary tuberculosis.

Case Report

A 78-year-old man came to the ENT department on Oct, 2019 presented with two months history of sore throat and left cervical mass. The history of the patient was marked by an allergic rhinosinusitis treated with nasal corticosteroids and antihistamine. Our patient reported anorexia, weight loss and night sweats. He had no history of family tuberculosis, chronic cough or other chest symptoms. On physical examination a fixed and firm mass about 3 × 2 cm was noted over left neck also the examination showed several lymphadenopathies in the right neck and oral examination found a bilateral tonsillar hypertrophy (Figure 1). Nasopharyngoscopy did not identify any pharyngeal or laryngeal lesions. The chest X-ray showed no abnormality. The full blood analysis was normal. The CT scan of the neck revealed a bilateral tonsillar hypertrophy probably tumoral (lymphoma) that obstructs the oropharynx, also a magma of left cervical lymphadenopathies and many others on the right, the nasopharynx, hypopharynx and larynx were normal (Figure 2).

On suspicion of malignancy, several biopsies of the left tonsillar and left cervical lymphadenopathy were performed. Histopathology revealed granulomatous inflammatory lesions with caseation necrosis (Figure 3). A chest CT scan

Corresponding Author:- A. Ftouhi

Address:- Department of Otorhinolaryngology, Head and Neck Surgery; Mohamed V Military Hospital Rabat. Morocco.

showed diffuse pulmonary micronodules related to miliary tuberculosis (Figure 4). The search of tubercle was positive in sputum. Serological tests for HIV, hepatitis B and C were negative.

Based on these findings of histological examination, pathological examination, and oral examination, a diagnosis of tonsillar tuberculosis associated to miliary tuberculosis was made.



Figure 1:- Bilateral Tonsillar Hypertrophy.

Discussion:-

Tuberculosis, an infective disease caused by Mycobacterium, can be pulmonary or extrapulmonary. Extrapulmonary tuberculosis accounts for 25% of all tubercular morbidity [1],[2]. Among extrapulmonary tuberculosis (EPTB), most common is lymph node tuberculosis while other forms are pleural tuberculosis, skeletal tuberculosis, CNS tuberculosis, abdominal tuberculosis, genito-urinary tuberculosis, and miliary tuberculosis, tubercular pericarditis is also seen [2].

Miliary tuberculosis is a severe, acute form of life-threatening tuberculosis [2]; it is due to the lymphohematogenic spread of bacilli tuberculosis from a ruptured focal lesion in the blood or lymphatic flow at one or more points of the body [2],[3].

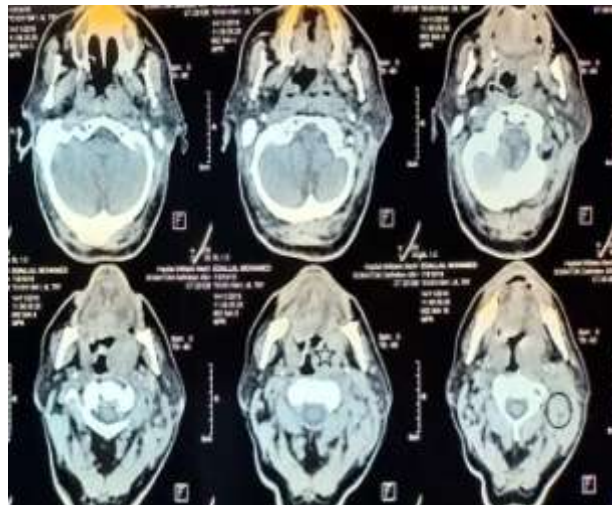


Figure 2:- CT scan of the neck;

- :left cervical lymphadenopathy.
- ☆ : tonsillar hypertrophy.

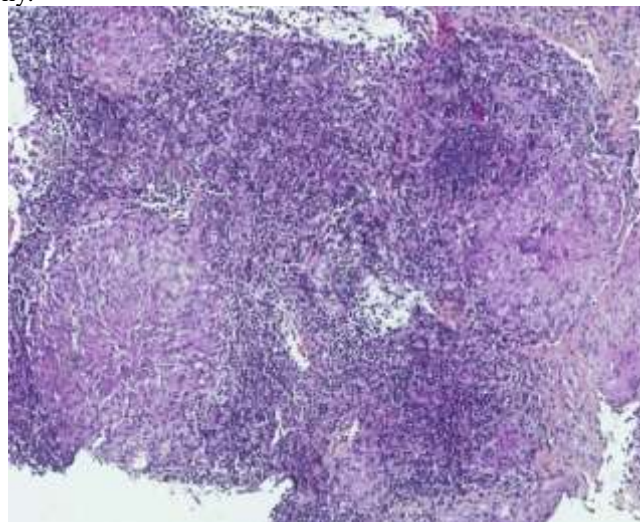


Figure 3:- Granulomatous inflammatory lesions with caseation necrosis (HE, Gx 200).

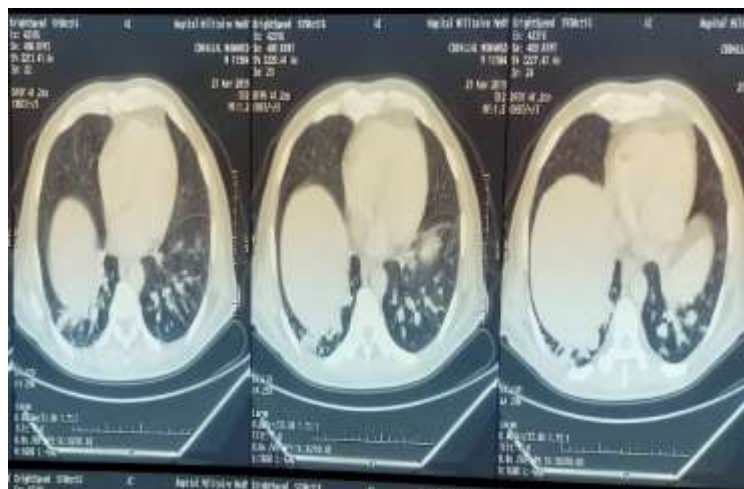


Figure 4:- Chest CT scan: diffuse pulmonary micronodules related to miliary tuberculosis.

Tuberculosis of the oral cavity is uncommon. Tongue and palate are the most sites affected whereas tonsillar tuberculosis is a rare localization with an incidence of less than 5% and it may be primary or secondary. Concurrent pulmonary tuberculosis is found in about 50% of patients with oral tuberculosis [4]. However, oral tuberculosis is not common in patients with pulmonary tuberculosis, despite the infective organism passing through the oral cavity in pulmonary tuberculosis patients [5]. This can be explained by the fact that the intact oral mucosa acts as a natural barrier and salivary enzymes also function as a defense mechanism [6]. Hematogenous and lymphatic spread are generally suggested as the route of spread to oral and oropharyngeal areas [5]. However, direct infection is also possible in patients with oral mucosal defects [5]. In our case the two-months history of oral symptoms leading to the diagnosis of miliary tuberculosis seems to indicate the primary nature of the tonsillar tuberculosis.

Primary tonsillar tuberculosis is rare, and often mistaken for a malignancy. The association with a miliary tuberculosis is an exceptional clinical entity.

Persistent sore throat, painful deglutition and hoarseness are the local common symptoms of tonsillar tuberculosis. Associated cervical lymphadenopathy can be seen in one third of the patients. Tonsillar mass, unilateral or bilateral, especially in the elderly, can clinically simulate a malignancy. Respiratory symptoms are usually missing in primary tonsillar tuberculosis, however general symptoms of tuberculosis, such as weight loss, persistent fever, malaise, cachexia and night sweats, are seen in only 37% of cases [4].

Pulmonary involvement should always be suspected and therefore an exploration, based on a chest X-ray, chest CT scan as well as the search for BK in the sputum, should be launched.

Diagnosis of tonsillar tuberculosis is based on histopathological findings and the identification of tubercle bacilli. In our case, we can see typical tuberculosis finding of granulomatous inflammatory lesion with caseation necrosis. Polymerase chain reaction (PCR) also has a good sensitivity (89%- 100%) for detecting mycobacteria [4], [7], [8]. Real-time PCR has the advantage of identifying rifampicin resistance and is helpful to choosing the medication regimen.

Hematologic malignancies, such as lymphoma, as well as sarcoidosis, syphilis and Wegner's granulomatosis, should also be considered in the differential diagnosis of chronic tonsillar diseases [7], [9].

Evaluation for immunocompromised states, such as HIV infection, is also necessary, especially in patients with extrapulmonary tuberculosis.

Anti-tuberculous medication for six to nine months is recommended as treatment for extrapulmonary tuberculosis. Usually, two months of isoniazid, rifampin, pyrazinamide, and ethambutol, followed by four to seven months of isoniazid and rifampin [4], [10]. Tonsillar lesions and symptoms improve with anti-tuberculous medication within two to eight weeks [5], [7], [9].

Conclusion:-

In conclusion, tonsillar tuberculosis should be considered when chronic oral lesions do not respond to routine medical therapy and it might be suspected if the tonsils are enlarged unequally on the two sides and are associated with cervical lymphadenopathy. This aspect can mislead the diagnosis towards a tumoral cause but the histology rectifies the diagnosis. The possibility of concomitant pulmonary tuberculosis should also be considered even if the patient does not have generalized or respiratory symptoms.

Tuberculosis of the tonsils associated to a miliary pulmonary tuberculosis is a rare entity, which prompted us to report this case.

References:-

- [1]. Tonsillar Tuberculosis: A Forgotten Clinical Entity. Anirban Das, Sibes K. Das, and Sumitra Basuthakur.
- [2]. Oropharyngeal and Miliary Pulmonary Tuberculosis Without Respiratory Symptom. Jung Hyun Chang, Jung Hyun Kim, Ju Wan Kang and Jeong Hong Kim.
- [3]. Miliary tuberculosis, a Moroccan study series. Zaghba, K. El Hachimi, H. Benjelloun, N. Yassine

- [4].Tuberculosis of the oral cavity: a systematic review. Ourania K Kakisi ¹, Argiro S Kechagia, Ioannis K Kakisis, Petros I Rafailidis, Matthew E Falagas.
- [5]. Oral tuberculosis in an asymptomatic pulmonary tuberculosis. Shikha B Singhaniya , Suresh R Barpande, Jyoti D Bhavthankar.
- [6].Extranodal ENT Tuberculosis. K. mighri, I. lahmar, B.hammami, M.jlaiel, A. moussa, N. driss.
- [7]. Primary Tuberculosis of the Oral Cavity in an Elderly Nonimmunosuppressed Patient: Case Report and Review of the Literature Smolka W, Burger H, Iizuka T, Smolka K.
- [8].Tuberculosis in childhoodDelane Shingadia.
- [9].Tuberculosis. Thomas R Frieden ¹, Timothy R Sterling, Sonal S Munsiff, Catherine J Watt, Christopher Dye.
- [10]. Extrapulmonary tuberculosis: an overviewMarjorie P Golden ¹, Holenarasipur R Vikram.