



Primary Nasal tuberculosis: A case report and Review of the Literature

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ABSTRACT: Nasosinusal localization of tuberculosis is rare. It is characterised by a polymorphic and non-specific clinical presentation, posing often a problem of differential diagnosis. The diagnosis is based on an anatomopathological and bacteriological examination with direct examination and culture. The treatment is essentially medical, based on antibacillaries. We report a rare case of primary nasal septum tuberculosis in a 25 years old patient.

CASE REPORT

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INTRODUCTION

Tuberculosis is a serious world health problem that affects many people in developing countries. The lung is the main site of tuberculosis [1].

Nasosinusal location is rare, it is characterised by a polymorphic and non-specific clinical presentation, often posing a risk to the differential diagnostic problem [1, 2].

The diagnosis is based on anatomopathological and bacteriological examination with direct examination and culture. The treatment is essentially medical, based on antibacillaries.

Through clinical observation and a review of the literature, we discuss the diagnostic and therapeutic difficulties of a case of primary nasal tuberculosis revealed.

CASE REPORT

A 25-year-old man patient without any particular pathological history, was presented to our ENT department with a 6-month history of a bilateral nasal obstruction at first intermittent, then progressively becoming almost permanent associated with a crusty rhinorrhea without epistaxis.

Inspection of the face reveals an eruption with crusting of the nasal vestibule with a enlargement of the nasal pyramid in its lower part.

Anterior rhinoscopy shows a mass depending on the antero inferior part of the nasal septum, greyish in appearance, with a soft surface, not bleeding on contact. The rest of the ENT examination is without particularities. There are no palpable cervical lymphadenopathies (Figure 1).



Figure 1: Mass depending on the anterior lower part of the nasal septum responsible for an enlargement of the nasal pyramid

A facial computed tomographic scan showed a regular, homogeneous tissue enlargement, occupying the anterior cartilaginous part of the nasal septum, without signs of bone lysis (Figure 2).



Figure 2: Axial CT scan showed a regular homogeneous enlargement occupying the anterior cartilaginous part of the septum without osteolysis

Histopathological examination of the nasal biopsy showed a granulomatous reaction with epitheloido-gigantocellular proliferation with caseous necrosis allowing the diagnosis of nasosinus tuberculosis to be retained. The chest X-ray was also normal. The patient benefited from an antituberculous quadritherapy based on isoniazid, rifampicin, ethambutol and pyrazinamide for six months with a favourable clinical assessment.

DISCUSSION

Tuberculosis is a world pandemic that continues to challenge the medical community worldwide. Poverty and growth are the main causes of the emergence and growth of the population. spread of this disease. The HIV pandemic has contributed to the increased diffusion of tuberculosis in the regions of the world where the Human Immunodeficiency Virus (HIV) is endemic [3] superior Airway location remains rare. Nasal tuberculosis is estimated to account for 2.6% of extra-pulmonary localisations [4].

Nasosinusal tuberculosis can be primary or secondary to pulmonary tuberculosis. It manifests itself by an often unilateral nasal obstruction, crusty rhinorrhoea, epistaxis, or nasal mass. Clinical examination may discover either a greyish or pinkish mass, with an irregular surface, implanted in the anterior part of the nasal septum and respecting the cartilaginous plane for a long time [5].

Facial CT scan, shows the homogeneous, well-limited nature of the lesion, with or without interruption of the nasal septum on the coronal sections, located at the antero-inferior part of the nasal cavity. This examination also shows the integrity of the paranasal cavities and especially the absence of invasive signs (osteolysis) [6].

The definitive diagnosis of nasosinusal tuberculosis is based on histology and on the identification of the bacillus Koch's mainly in the cultures on the Lowenstein Jensen milieu. In case of negativity of the culture, PCR offers the possibility of detecting rapidly the Mycobacterial antigen [7]. The differential diagnosis is poses with chronic inflammatory processes such as sarcoidosis, Wegener's Granulomatosis, and the infectious processes and neoplastics [8]. Untreated nasosinusal tuberculosis is complicated by septal perforation, rhinitis atrophic or nasal stenosis. The treatment is essentially medical, based on antibacillary drugs which often allow complete recovery.

CONCLUSION

Tuberculosis of the nasal cavities, although rare, remains a possible nosological entity, especially in endemic regions. It is a primitive lesion with very little bacilliferous, its diagnosis is histological. Its treatment is well codified. Diagnostic difficulties are possible, which may require a surgical approach with an anatomopathological examination of the surgical specimen.

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