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Tuberculosis of the Cavum Case Report

A. FTOUHI, B.HEMMAOUI, G.ZAKARIA, J.OUBENJAH, N.ERRAMI, M.ZALAGH, F.BENARIBA.
Department of Otorhinolaryngology, Head and Neck surgery
MOHAMED V MILITARY HOSPITAL RABAT. MOROCCO

Abstract:- Tuberculosis is an important cause of morbidity and mortality worldwide. We report the case of a 68-year-oldwoman who presented, 06 months before her consultation, an isolated unilateral cervical lymphadenopathy without any others symptoms. Nasofibroscopy showed a mass of the cavum and the histopathology revealed granulomatous inflammatory lesions with caseation necrosis. The declining cavum mass was noticed after nine months ofanti-tuberculous medication.

Keywords:- *Cavum, Tuberculosis, Antibacillary treatment.*

I. INTRODUCTION

Tuberculosis (TB) is a chronic bacterial infection caused by Mycobacterium Tuberculosis, it represents one of the main causes of morbidity and mortality worldwide. Tuberculosis of the cavum is a rare localization representing less than 1% of the forms of this disease. Involvement of the cavum can be primary, by direct inhalation, or secondary to a pulmonary localization. It is more common in developing countries but it seems to be on the rise since the appearance of AIDS even in developed countries. The problem of differential diagnosis arises essentially with cavum cancer, and only histology can decide.

II. CASE REPORT

Mrs. M.R. admitted to our service in October 2018, she is a 68-year-old woman, with nohistory of pulmonary tuberculosis or a tuberculosis contagion, who presented 06 months before her consultation, isolated unilateral cervical lymphadenopathy without rhinological, pulmonary or general symptomsof tuberculosis infections.

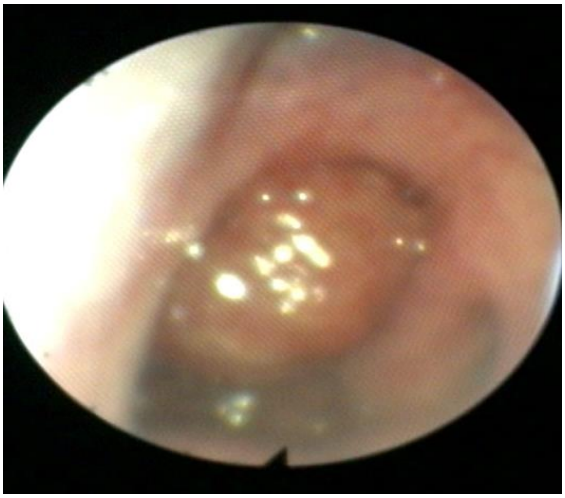

Fig. 1: Nasofibroscopy showing the mass of the cavum.

Fig. 2: Nasofibroscopy at the end of treatment showing the disappearance of the mass.

The clinical examination revealed firm, slightly fixed unilateral jugulo-carotid lymphadenopathy measuring 36 mm without any inflammatory signs.

A nasofibroscopy showed the existence of a budding and bleeding mass of the postero-superior wall of the cavum reaching the choanae (Figure 1).

A CT scan confirmed the presence of a mass in the superior wall of the cavum as well as unilateral cervical lymphadenopathy (Figure 4).

The biopsy of the mass of the cavum revealedgranulomatous inflammatory lesions with caseation necrosis (Figure 3).

A chest X-ray showed no progressive lung lesions and the sputum BK test was negative.

The patient was treated with an antibacillary treatment combining isoniazid, rifampicin, pyrazinamideandethambutol for two months, then the combination isoniazid and rifampicin for seven months. the clinical and endoscopic control was marked by the disappearance of all the lesions(Figure 2).

The patient underwent a monthly check-up in an ENT consultation until the end of the antibacillary treatment, then an annual check-up, without any sign of relapse or recurrence.

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III. DISCUSSION

Tuberculosis is a real public health problem in Morocco. Approximately 9 million people in the world contract tuberculosis and 2 million die from it every year[1],[2],[3].

Although the upper respiratory tract is the entry point for Mycobacterium Tuberculosis, their involvement remains rare (less than 2%). ENT localization of tuberculosis is dominated by lymph node followed by laryngeal localization [1] and nasopharyngeal involvement represents less than 1% [4]. It can be primary or secondary. The presence of concomitant pulmonary infections is unusual (25% to 30%) [4].

Tuberculosis of the cavum is noticed at any age with extremes between 8 and 62 years. It affects both men and women [5]. Most of the published cases concern patients of North African and Asian origin (especially China), which attests to the endemicity of this pathology [5], [6]. Contamination is mainly by direct airway, by inhalation dust contaminated with Mycobacterium Tuberculosis from a subject with active pulmonary tuberculosis.[4].

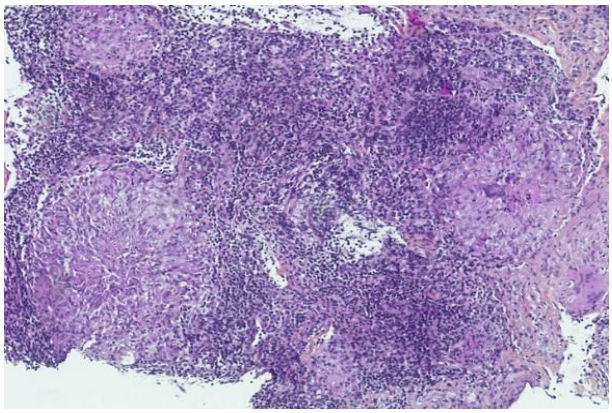

Fig. 3: granulomatous inflammatory lesions with caseation necrosis (HE, Gx 200).

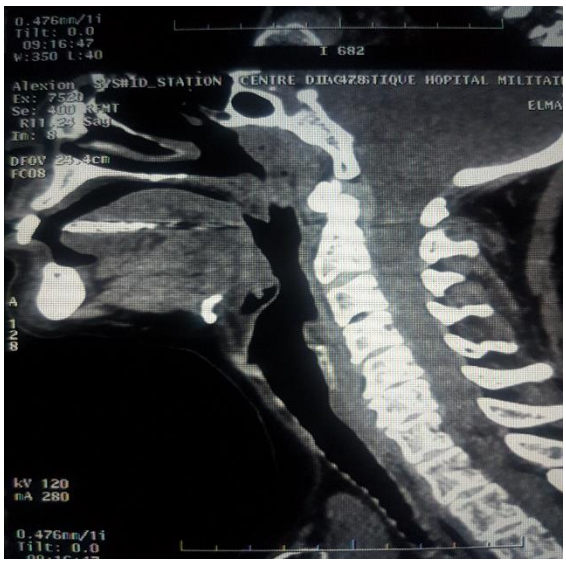

Fig. 4: CT scan of the neck showing the mass of the cavum.

Rarely, contamination occurs via the haematogenous or lymphatic route, from a loco-regional tuberculous infection site. Even more rarely, contamination occurs by ingestion of raw milk contaminated with bovine bacillus.

Clinically, tuberculosis of the cavum is manifested by a symptomatology, close to a malignant tumor, dominated by a lymph node syndrome which constitutes the main revealing mode, then a rhinological syndrome with nasal obstruction or epistaxis, and finally an otological syndrome in the form of seromucous otitis or reflex otalgia. Otherwise, the general signs may be missing.

The pillar of the clinical examination is the nasofibroscopy which can show several aspects of tuberculosis of the cavum (ulcerative-budding lesion, infiltrating, bleeding or not).

CT and MRI are essential for diagnosis, they allow to study the local and regional extension and to carry out an assessment of cervical lymphadenopathy.

The biopsy of the lesion and the histological study are the only means to bring a diagnosis of certainty by revealing the presence of an epithelioid granuloma with giant cells with caseous necrosis.

The search for another localization is systematic, especially pulmonary, the standard radiography and the search for BK in the sputum are often negative.

In the case of tuberculosis with susceptible bacilli, treatment is based on the combination of rifampicin (10 mg/kg), isoniazid (4 to 5 mg/kg), pyrazinamide (25 mg/kg) and ethambutol (15 mg/kg) for two months, then rifampicin and isoniazid for four to seven months [7].

Surgery is only complementary, it allows histological and bacteriological samples and a possible adenectomy of persistent lymphadenopathy. The evolution is generally favorable. however, sequelae are possible in the event of velar or tonsillar involvement such as perforations, adhesions and retractile scars with functional disorders that may require surgical treatment [6].

IV. CONCLUSION

In conclusion, tuberculosis of the cavum is rare, however, it should always be considered, especially in endemic countries. It is often mistaken for cavum cancer, and only biopsy and histology can establish a positive diagnosis. The classic antibacillary treatment usually allows healing without sequelae.

- **Conflicts of interest**

  The authors declare no conflicts of interest regarding the publication of this paper.

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REFERENCES

[1.] Nalini B, Vinayak S. Tuberculosis in ear, nose and throat practice: its presentation and diagnosis. Am J Otolaryngol. 2006 Jan-Feb;27(1):39-45. PubMed | Google Scholar.

[2.] Tonsillar Tuberculosis: A Forgotten Clinical Entity.Anirban Das, Sibes K. Das, and Sumitra Basuthakur.

[3.] Oropharyngeal and Miliary Pulmonary Tuberculosis Without Respiratory Symptom. Jung Hyun Chang, Jung Hyun Kim, Ju Wan Kangand Jeong Hong Kim.

[4.] Nasopharyngeal tuberculosis: report of four cases and review of the Literature Youssef Darouassi1,&, Abdelfettah Aljalil1 PanAfricanMedicalJourney

[5.] Alouane M, Abrouq A, Zouhair A, Azendour B, Benboumehdi M, Messari H. The pseudo-tumoral form of tuberculosis of the cavum: about two cases. Maghreb Med 1996;301:26-8.

[6.] Martínez A, Lede Á, Fernández JA. Primary nasopharyngeal tuberculosis: an unusual location. ActaOtorrinolaringologica. 2011;62(5):401-3. PubMed Google Scholar

[7.] Extrapulmonary tuberculosis: an overview Marjorie P Golden [1], Holenarasipur R Vikram.