



Nasopharyngeal Tuberculosis: A Case Report

Zakaria Arkoubi, Razika Bencheikh, Anas Benbouzid, Abdelilah Oujilal and Leila Essakalli
ENT Department, Head and Neck Hospital of Rabat

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ABSTRACT

Tuberculosis is a chronic infectious disease caused by *Mycobacterium tuberculosis*. It's a major health problem in developing countries such as in north Africa. the incidence of tuberculosis in developing country is increasing, but also in the developed ones due to immunodeficiency. Most clinician do not consider tuberculosis when they are faced a symptomatology that refers to a lesion in the nasopharyngeal area., so often lead to misdiagnosis and inappropriate treatment. Biopsy and histopathological examination should be done in every case to avoid misdiagnosis. Nasopharyngeal tuberculosis has an excellent prognosis and it has complete resolution if treated properly.

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Introduction

Tuberculosis is the deadliest infectious disease and continues to be a major challenge to global health (1)

Nasopharyngeal tuberculosis represent a rare type of extrapulmonary form of tuberculosis infection comprising only less than 1% of forms in the upper respiratory tract (1)

We are about in this article to present a case of nasopharyngeal tuberculosis that can lead to misdiagnosis especially that Morocco is one of the countries that has a high rate of nasopharyngeal carcinoma.

Case report

It's about a 16 years old young girl that present to our department for a tumefaction which was growing progressively for 3 months.

A first examination reveals a painful mass in the right side of the neck in the ganglion territory 2.

The mass was firm and the portion of the skin right above was inflammatory as we can see in the figure 1.

An endoscopic examination was made and it shows a thickening and inflammatory mucosa in the nasopharyngeal area, like a remnant of vegetations. No specific lesion was identified.

Despite that we did make a CT-Scan (Figure2) that came up with signs referring to the presence of multiple hypertrophic nodes in the right neck, and a nasopharyngeal biopsy was made right after.

The anatomopathological examination was about an inflammatory tissue with granulomatosis, gigantocellular cells and necrosis. The tuberculosis was confirmed by detecting *tuberculosis hominis* in nasopharyngeal biological sample.



Figure 1. Laterocervical adenopathy



Figure 2. Axial view of right lymphadenopathy

The treatment was preferred two months of Isoniasid, Rifampicin, Ethambutol and Pyrazinamid followed By 4 months of Isoniazid and Rifampicin.

The adenopathy decreased within the first two months of treatment and the control after one year was free of any recurrence.

Discussion

The location of tuberculosis in the nasopharyngeal site is a rare form of extrapulmonary tuberculosis in both tuberculosis-endemic and non-endemic areas. It usually occur secondary to pulmonary tuberculosis. (2)

Symptoms of nasopharyngeal tuberculosis occurs most of the time as a cervical lymphadenopathy, epistaxis, nasal obstruction and even hearing loss and otalgia. Relating to the general disorders we might find night sweats weight loss and fever. In the present case it was the lymphadenopathy that made the patient present herself to our department. As well known in our country and all over the north zone of the African continent, there is a high rate of nasopharyngeal carcinoma. So due to that, we didn't hesitate to get a CT-Scan a make biopsy even if it wasn't a specific lesion in the cavum but only mucosal thickness.

It's reported that the CT-Scan and magnetic resonance imaging were reported as valuable tools in head and neck tuberculosis, demonstrating the sites, pattern, and extension of the disease (3)

Cai et al. suggested that a caseous necrosis in a nasopharyngeal lesion on pathology might be a valuable clue to diagnosis. (3)

A typical pathological report for diagnosis is granulomatous inflammation with multinucleated giant cells of Langhans type and foreign body giant cells, with or without necrosis (3)

Granulomatous inflammation with positive Ziehl-Neelsen staining for acid-fast bacilli or bacterial culture can also be demonstrated (3)

The minimal duration of extrapulmonary TB treatment is six months [11, 14, 19, 20]. Treatment regimen is either a triple combination including isoniazid (INH), rifampicin (RFP), and ethambutol (EB) for 9–18 months or a quadritherapy which add pyrazinamide (PZA) for nine months [. Some authors preferred two months of INH, RFP, EB, and PZA followed by INH and RFP for four to seven months. Nasopharyngeal tuberculosis carries a good prognosis and no cases of resistance to antituberculous drugs or therapeutic failure had been noticed.(3)

Conclusion

Nasopharyngeal tuberculosis is a rare form of extrapulmonary tuberculosis. Even if tuberculosis was one of the diseases that were about to disappear in developed countries, but that is not seems to be as soon as supposed due to immunodeficiency. We have to think about this diagnosis each time nasopharyngeal symptoms persists and go for a nasopharyngeal biopsy especially in endemic areas of nasopharyngeal carcinoma.

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