

## **An Atypical Presentation of Tuberculosis Lymphadenitis**

MS Sakat<sup>1</sup>, K Kilic<sup>2</sup>, R Mazlumoglu<sup>1</sup>, H Ucuncu<sup>1</sup>

### **ABSTRACT**

Tuberculosis (TB), one of the oldest diseases of human, remains a global health problem especially in developing countries. Tuberculosis is classified as pulmonary or extra-pulmonary. Tuberculosis lymphadenitis is the most common form of extra-pulmonary TB. In this report, we presented a patient with TB lymphadenitis who had atypically multiple lymph node involvements similar to malignancies without complaints about a lung disease. An 81-year-old male presented with a three-month history of a growing swelling at cervical region. At last one-month, another swelling was occurred at right axillary region. Physical examination revealed multiple lymphadenopathies at cervical and axillary regions.

A computerized tomography (CT) revealed a lymphadenopathy at right axillary region 5 x 2 cm in diameter, a cystic mass or abscess at right posterior cervical region 3 x 2 cm in diameter and multiple lymphadenopathies at cervical regions. Thoracic tomography revealed fibroatelectasy, thicker fibrotic bands and increase of reticulo-nodular density at both lungs which were reported as reactivation of tuberculosis. An excisional biopsy was performed which revealed granulomatous inflammatory process with caseification. Asido-resistans bacteria were detected from microbiological assessment of both the pus of the mass and the nodular lesion *via* polymerase chain reaction (PCR). The diagnosis was reactivated tuberculosis lymphadenitis. Although multiple lymphadenopathies accompanied with weight loss refer to malignancies, tuberculosis must also be considered in differential diagnosis.

**Keywords:** Multiple cervical lymphadenopathies, tuberculosis, tuberculosis lymphadenitis

---

From: <sup>1</sup>Department of Otorhinolaryngology, Ataturk University, Faculty of Medicine, Erzurum, Turkey and  
<sup>2</sup>Otorhinolaryngology Clinics, Palandoken State Hospital, Erzurum, Turkey.

Correspondence: Dr H Ucuncu, Department of Otorhinolaryngology, Ataturk University, Faculty of Medicine, Erzurum 25240, Turkey. Phone: +90-442-344 7133, Fax: +90- 442-236 1301.  
E-mail: hucuncu61@gmail.com

## **INTRODUCTION**

Tuberculosis (TB), one of the oldest diseases of human, remains a global health problem especially in developing countries. Tuberculosis is classified as pulmonary or extra-pulmonary. When the lesions of TB occur in organ systems outside the lungs, such as lymph nodes, pleura, gastrointestinal tract, central nervous system, the disease is called as extra-pulmonary TB (1), 22–30% of patients with TB have extra-pulmonary disease (2). Tuberculosis lymphadenitis is the most common form of extra-pulmonary TB which accounts approximately 35–40% of all extra-pulmonary diseases (2, 3). Posterior triangle nodes, deep cervical nodes, submental and supraclavicular nodes are the most commonly involved nodes in TB lymphadenitis (2, 3).

Involvement of other lymph nodes such as axillary, inguinal, mesenteric lymph nodes may also occur. The involvements of lymph nodes in adults are generally unilateral and single. In this report, we presented a patient with atypically multiple lymph node involvement of TB lymphadenitis without complaints about a lung disease.

## **CASE**

An 81-year-old male presented with a three-month history of a growing swelling at cervical region. At last one-month, another swelling was occurred at right axillary region. He also complained about fatigue and weight loss. There were no complaints about lung diseases such as cough or sputum. Physical examination revealed multiple lymphadenopathies at cervical and axillary regions (Fig. 1).



Fig: 1. The appearance of lymphadenopathies at right axillary, right supraclavicular and left supraclavicular regions. An erythematous nodular lesion was observed at anterior chest skin (Fig. 2).



Fig: 2. The erythematous lesion at anterior chest region.

Because of multiple gross lymphadenopathies and weight loss, the patient was thought to have a malignancy. A computerized tomography was performed which revealed a lymphadenopathy at right axillary region 5 x 2 cm in diameter, a cystic mass or abscess at right

posterior cervical region 3 x 2 cm in diameter and multiple lymphadenopathies at cervical regions. Thoracic tomography revealed fibroathelctasy, thicker fibrotic bands and increase of reticulo-nodular density at both lungs which were reported as reactivation of tuberculosis. Fine needle aspiration biopsy of the mass at posterior cervical region was non-diagnostic. An excisional biopsy was performed which revealed granulomatous inflammatory process with caseification. Asido-resistans bacteria were detected from microbiological assessment of both the pus of the mass and the nodular lesion *via* PCR. The diagnosis was reactivated tuberculosis lymphadenitis. Antituberculosis treatment was given. The patient is still at follow-up period.

## **DISCUSSION**

Tuberculosis lymphadenitis is the most common extra-pulmonary form of TB. The most common agent is mycobacterium tuberculosis complex in adults with a ratio of 95%, while mycobacteria other than TB (MOTT) are more common in children (2, 4). While MOTT generally involve upper respiratory tract or tonsils and spread directly to closer lymph nodes, mycobacterium family causes a disease in lungs and spreads lymphogenously or hematogenously to other tissues (4).

The clinical manifestation depends on the involved site. Patients with TB lymphadenitis generally presents with painless mass which may be fixed to surrounding structures (5). Sixteen per cent of patients have previous TB history (2). Additional symptoms may be observed in 43% of patients. The most common additional symptoms are fever, weight loss and fatigue (2, 5).

The diagnosis of the disease depends on clinical suspicion, histological assessment of granulomatous lesions and microbiological detection of the bacteria. Radiological images may be helpful for diagnosis. Postero-anterior radiography is positive at only 14–20% of TB lymphadenitis (2). Ultrasonography may reveal a capsulated, hypoechoic mass. Computerized tomography and

magnetic resonance imaging may be helpful for differential diagnosis. The accurate diagnosis can be established by detecting the asido-resistant bacteria in tissue samples. Several methods such as culture, polymerase chain reaction, Erlich-Ziehl-Nielsen staining can be used for detecting the bacteria (1, 2).

Anti-tuberculosis drugs are important for the management of TB lymphadenitis. Surgery is reserved for diagnosis of the patients who has negative results in fine needle aspiration biopsy, and for treatment of fistula formation.

## **CONCLUSION**

Tuberculosis is still remains as a global health problem. Although multiple lymphadenopathies accompanied with weight loss refer to malignancies, tuberculosis must also be considered in differential diagnosis.

## REFERENCES

1. Garg AK, Chaudhary A, Tewari RK, Bariar LM, Agrawal N. Coincidental diagnosis of tuberculous lymphadenitis: a case report. *Aust Dent J* 2014; **59**: 258–63.
2. Öksüzler Ö, Tuna E, Özbek C, Özdem C. ServikalTüberkülozLenfadenit. *KBB-Forum* 2008; 7: 102–6.
3. Tachibana T, Orita Y, Fujisawa M, Nakada M, Ogawara Y, Matsuyama Y et al. Factors that make it difficult to diagnose cervical tuberculous lymphadenitis. *J Infect Chemother* 2013; **19**: 1015–20.
4. Karagöz T, Senol T, Bekçi TT. TüberkülozLenfadenit. *ToraksDergisi*, 2001; **2**: 74–79.
5. Biadlegne F, Tesfaye W, Anagaw B, Tessema B, Debebe T, Anagaw B et al. Tuberculosis lymphadenitis in Ethiopia. *Jpn J Infect Dis* 2013; **66**: 263–8.