
An unusual reason of parotid gland enlargement; parotid gland tuberculosis

Beril ERDOĞAN¹, Esra UZASLAN¹, Ezgi DEMİRDÖĞEN¹, Şaduman BALABAN ADIM², Arzu SALAN³, Ümit ÇAKIR⁴

¹ Uludağ Üniversitesi Tıp Fakültesi, Göğüs Hastalıkları Anabilim Dalı,

² Uludağ Üniversitesi Tıp Fakültesi, Patoloji Anabilim Dalı,

³ Ali Osman Sönmez Onkoloji Hastanesi, Patoloji Kliniği,

⁴ Ali Osman Sönmez Onkoloji Hastanesi, Kulak Burun Boğaz Kliniği, Bursa.

ÖZET

Parotis bezi büyümesinin nadir bir nedeni; parotis bezi tüberkülozu

Akciğer tüberkülozu, Türkiye’de sık olmasına rağmen parotid gland tüberkülozu çok nadir görülür. Otuzdokuz yaşında kadın hasta yüzünün sol tarafındaki şişlik şikayeti ile başvurdu. Tanı için eksizyonel biyopsi yapıldı. Histopatolojik incelemede tüberküloz ile uyumlu nekrotizan granülomatöz iltihap saptandı.

Anahtar Kelimeler: Parotis gland, tüberküloz.

SUMMARY

An unusual reason of parotid gland enlargement; parotid gland tuberculosis

Beril ERDOĞAN¹, Esra UZASLAN¹, Ezgi DEMİRDÖĞEN¹, Şaduman BALABAN ADIM², Arzu SALAN³, Ümit ÇAKIR⁴

¹ Department of Chest Diseases, Faculty of Medicine, Uludag University, Bursa, Turkey,

² Department of Pathology, Faculty of Medicine, Uludag University, Bursa, Turkey,

³ Department of Pathology, Ali Osman Sönmez Oncology Hospital, Bursa, Turkey,

⁴ Department of Otolaryngology, Head and Neck Surgery, Ali Osman Sönmez Oncology Hospital, Bursa, Turkey.

Yazışma Adresi (Address for Correspondence):

Dr. Beril ERDOĞAN, Uludağ Üniversitesi Tıp Fakültesi, Göğüs Hastalıkları Anabilim Dalı, Görükle, BURSA - TÜRKİYE
e-mail: drberilbahadir@hotmail.com

Although pulmonary tuberculosis is common in Turkey, parotid gland tuberculosis is rarely seen. A 39 years old female presented with left side swelling on her face. The diagnosis was made excisional biopsy. Histologic examination of the operative specimen revealed necrotising granuloma concordant with tuberculosis.

Key Words: Parotid gland, tuberculosis.

The incidence of tuberculosis is rising throughout the world. Pulmonary tuberculosis is the most frequent form of tuberculosis, but any organ in the body can be involved.

Parotid gland tuberculosis is very rare (1). Intraparotid and periparotid lymph nodes may become infected either by lymphatic drainage from the oral cavity or hematogenously from a pulmonary focus (2). Clinic presentation of parotid gland tuberculosis varies from that of an acute infectious process to an indolent chronic one. The diagnosis of parotid gland tuberculosis can only be confirmed with gland excision. Although it is very rare, parotid gland tuberculosis should be kept in mind, in differential diagnosis of parotid gland enlargements.

By presenting, this case we aimed to discuss an unusual form of *Mycobacterium tuberculosis* infection which can be a reason of parotid gland enlargement.

CASE REPORT

A 39 years old female presented with left side swelling on her face. Her complaint was pain whilst opening of her mouth. Symptoms like weight loss, cough, fever, chest pain and night sweat was not existing in our patient. Also, she did not give any past history of tuberculosis infection either in herself or in her family. Examination of different systems revealed no abnormality except swelling of the left side of her face. The swelling was diffuse in nature without a color change and there was no sign of a fistula over the skin. Intraoral examination was also normal. Laboratory profile was unremarkable respectively, hemoglobine: 13.2 mg/dL, white blood cell: 7300/mm³, platelet: 225.000/mm³, erythrocyte sedimentation rate: 9 mm/hour, AST: 18, ALT: 17, PPD: 15 mm, BCG: (+).

Chest X-ray was normal (Figure 1). On contrast enhanced T1-weighted MR image the lesion showed no enhancement compared with parotid gland. There was a sharp interface between the lesion and parotid gland (Figure 2).



Figure 1. Normal chest X-ray of the patient with parotid gland tuberculosis.



Figure 2. Contrast enhanced T1-weighted lesion shows diffuse enlargement of the left parotid gland with marked contrast enhancement.

Fine needle aspiration of the parotid gland revealed benign siliadenitis. Later, excisional biopsy was performed and histologic examination of the operative specimen revealed necrotising granuloma concordant with tuberculosis (Figure 3,4).

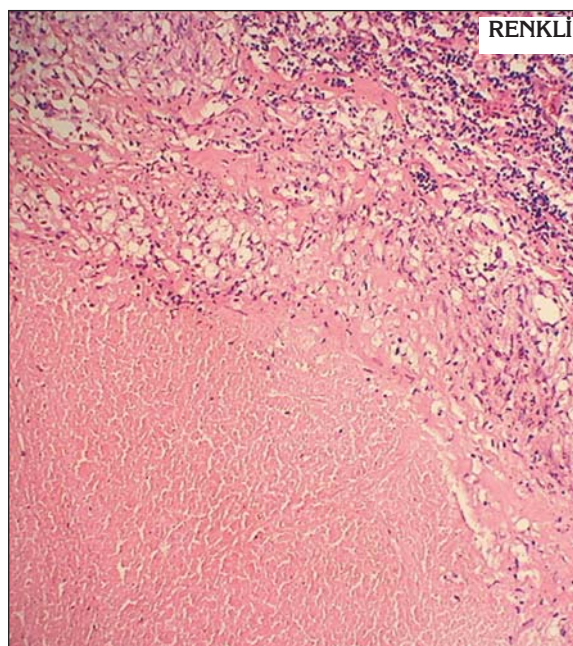


Figure 3. Granuloma with caseating necrosis, stained with haematoxylin eosine (HE x200).

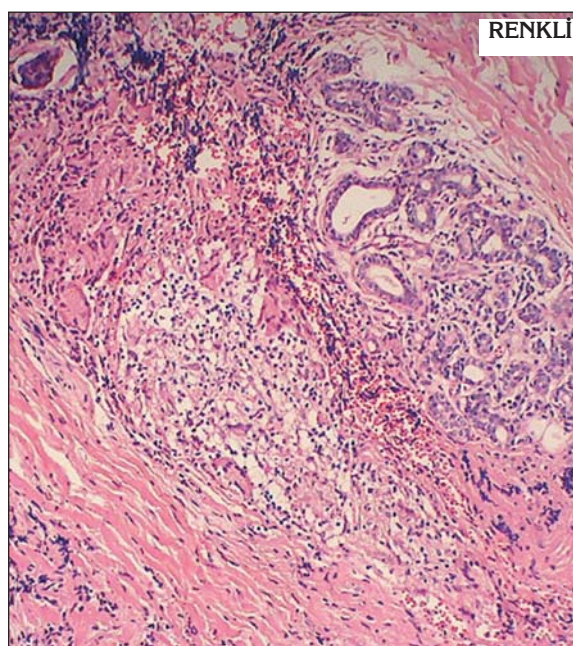


Figure 4. Granuloma in parotid gland with ductal and acinar infiltration (HE x100).

Anti-tuberculous treatment regime, consisting of isoniazid, rifampicin, ethambutol, and morfasinamide, was started for the treatment of parotid gland tuberculosis.

DISCUSSION

Tuberculosis is a common disease in Turkey however tuberculous infection of the parotid gland is still very uncommon. During tuberculosis infection, intraparotid and periparotid lymph nodes may become infected either by lymphatic drainage from the oral cavity or hematogenously from a pulmonary focus (2). An interesting route was described by Diaz et al. and they documented a parotid gland tuberculosis after intravesical instillation of BCG for a superficial bladder cancer (3). The patients present usually with the swelling of the parotid gland. Otorrhea and facial paralysis are two uncommon presentations which was encountered in the literature (4,5). Our case only presented with swelling of the left side of her face. Clinically parotid gland tuberculosis closely resembles parotid neoplasm and the diagnosis is usually difficult. Fine needle aspiration is generally inconclusive as was in our case. Excisional biopsy is the accurate way for the diagnosis of this granulomatous lesion (2). Although we could not confirm the diagnosis with microbiological studies, the patient was started on anti-tuberculous medication after the documentation of the typical caseification necrosis and in the follow up period parotid gland swelling regressed gradually.

Although *M. tuberculosis* infection is a rare cause of parotid gland enlargement, still it should be kept in mind in differential diagnosis of a patient with parotid gland swelling, especially in countries whereas tuberculosis was still endemic.

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