Abstract

Tuberculosis of the oral cavity accounts for less than one percent of all cases of tuberculosis, seen in both the primary and secondary stages of the disease. It presents usually as a single, painful, ulcer however, multiple painless ulcers may also be seen. The most common location in the oral cavity is tongue. The palate, buccal mucosa, floor of the mouth, gingiva, and lip are other possible sites of involvement. In secondary tuberculosis, oral lesions are accompanied by lesions in the lungs, lymph nodes, or in any other part of the body. We hereby report a case of tuberculosis of lip in a 24 year old female, secondary to pulmonary tuberculosis.

Key words: Tuberculosis; lip; secondary

Introduction

Oral lesions of tuberculosis can be seen either as primary lesion or may manifest as secondary stage of the disease. The commonest site of tubercular involvement in the oral cavity is the tongue and involvement of lip, as was seen in this case is exceptionally rare. Primary oral tuberculosis may present as a diagnostic challenge for the clinician especially when it is the sole manifestation of the disease [1]. Secondary oral tuberculosis usually results from inoculation by the infected sputum or hematogenous spread by Mycobacteria [2].

Case Report

A 24 year old female patient presented in the ENT Outpatient Department with lower lip swelling for past 25 days. There was no history of cough, fever or hemoptysis. The patient complained of loss of appetite and weight since the last few months. On enquiring, a history of contact was elicited, as her husband was a known case of tuberculosis who was diagnosed 3 years back. A history of irregular intake of anti-tubercular drugs was also obtained from him. The patient was a non-smoker and there was no history of alcohol intake or tobacco chewing. Her general condition was stable, she was afebrile and no pallor, icterus or cervical lymphadenopathy was noted. Local examination showed a swelling on the mucosal aspect of the lower lip which had a soft cystic consistency, measuring 1x1 cm in size and reddish blue in colour (Fig. 1). A provisional diagnosis of retention cyst was made in the ENT OPD and patient was referred for fine needle aspiration cytology of the lip swelling. Aspiration yielded a blood mixed fluid aspirate which was stained with Giemsa stain and examined microscopically. The FNAC smears showed moderate cellularity comprising of sheets of histiocytes along with neutrophils in a highly necrotic background. Many epithelioid cell granulomas and multinucleated giant cells were also evident (Fig. 2). Ziel Neilson stain for acid fast bacilli was found to be positive (Fig. 3). A cytological impression of tubercular abscess, lower lip was made.

Routine haematological and biochemical investigations were all within normal limits however Erythrocyte Sedimentation Rate was raised with a 40 mm fall in 1st hour. Routine urine and microscopy was within normal limits. Serological tests for Hepatitis B Surface Antigen, HIV-1 and HIV-2 were non-reactive.
Discussion

The oral cavity is an uncommon site of involvement by tuberculosis. Oral TB is rare and accounts for less than 1% of all cases of TB. However, with an increase in the number of TB cases, these unusual forms of oral cavity are more likely to occur and may be misdiagnosed [3]. Oral tuberculosis is seldom primary, but more commonly secondary to pulmonary disease. A study has reported four cases of tuberculosis of oral cavity, one of which was primary and three were secondary. [4] It was found as a secondary infection in 58% and as primary infection in 42% patients [5]. Oral lesions of tuberculosis are nonspecific in their clinical presentation and are often overlooked by the clinician. Tuberculous lesion occasionally precedes the detection of pulmonary tuberculosis as seen in the present case. Mostly lesion presents as a non-healing painful ulcer [5] in which a differential diagnosis of simple traumatic ulcer and carcinoma can also be considered. In the present case, the clinical presentation was unusual, a cystic lesion was seen in the lower lip and the first impression was a retention cyst. There were no enlarged cervical lymphnodes which also was an unusual feature.

*M. tuberculosis* infects all parts of the oral cavity, more often in males [5]. The tongue, gingiva, and palate are the most frequent sites of involvement by oral tuberculosis. In the tongue, the common sites of ulcer formation are the lateral border and the tip of the tongue, whereas the hard palate is more frequently involved than the soft palate [1]. Tubercular involvement of the lip, as seen in our case, is even rarer.

Although the exact pathogenesis is still unknown, the organism enters through breach in the mucosal surface. Abbott et al were able to isolate the tubercle bacilli from mouth washings of 44.9% of the patients with active pulmonary tuberculosis [6]. It is usually acquired through infected sputum coughed out by a patient with open pulmonary tuberculosis or by hematogenous spread [7]. The tubercle bacilli are transferred from a primary focus in some part of the body and localized in oral cavity after trauma. The systemic factors include impaired host resistance and increased virulence of the organisms [8].
The involvement of maxilla and the mandible may occur secondary to the extension of gingival lesion or by hematogenous route leading to tuberculous osteomyelitis. FNAC suggested the diagnosis of a granulomatous lesion and the diagnosis of tuberculosis was considered. It was further confirmed by AFB staining. FNAC may show similar findings in atypical mycobacterial infections, sarcoidosis and lymphomas [9].

In oral cavity TB, standard treatment regimen is successful, so a planned standard combination treatment of four drug regimen was started, resulting in gradual relief of symptoms and healing of the lesion [10,11].

Conclusion

Tubercular involvement of the lip is a rare presentation of a common disease. This case highlights the importance of a high index of suspicion among clinicians for this manifestation of tuberculosis which will lead to timely diagnosis and institution of specific anti-tubercular treatment. Evidence of systemic or lung involvement may not be present in all cases and laboratory and radiological findings serve as a good marker, especially when there is high index of suspicion. Definitive tissue diagnosis along with demonstration of AFB, as in the present case remains the gold standard.

REFERENCES