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Case Report

Oral Cavity Tuberculosis Masquerading as Squamous Papilloma

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Abstract

Tuberculosis (TB) is a unique disease caused by Mycobacterium tuberculosis. The ability to infect and invade various parts of our body makes it such a contagious disease. It has been known to our society for thousands of years. Since then, we tend to describe it as a chronic infectious disease and classify it into pulmonary and extrapulmonary TB.

TB infection of the oral cavity is extremely rare and noticed in about 0.2 - 1.5% TB infected cases [1]. The most common clinical appearance are oral ulcers, odynophagia and lymph node enlargement surrounding the neck. None of these symptoms were seen in our patient. Here, we report a 29 years old gentlemen presenting with a small mass growing in the right palatopharyngeus muscle (posterior pillar) mimicking a squamous papilloma but actually TB of the oropharynx from histopathological analysis.

Keywords: Tuberculosis (TB); Oral Cavity; Erythrocyte Sedimentation Rate (ESR)

Case Report

A 29 year old male with no previous medical illness presented with cough associated with throat irritation and whitish sputum of 2 week duration. He had no fever, loss of appetite or night sweats. Patient is a healthcare worker, however denies any contact with a TB patient.

On examination, there was a pedunculated mass at the right posterior pillar. His neck examination was normal. Flexible laryngoscopy showed no abnormality of his supraglottic structures with bilateral, mobile, vocal cords.

He was investigated to rule out TB, with normal erythrocyte sedimentation rate (ESR). No acid fast bacilli (AFB) was detected in his sputum and chest X-ray revealed clear lung findings. However his Mantoux test was raised at 20 mm.

We proceeded with excision of the right posterior pillar mass under local anaesthesia with the assistance of Colorado Fine tip monopolar diathermy. The excised mass was sent for histopathological examination where results revealed a sinonasal papilloma. The sample was also sent for TB PCR where Mycobacterium tuberculosis was detected.

He was commenced on anti-tuberculosis treatment (AKURIT) for 6 months. Since the completion of treatment, patient has been well and relieved from his presenting complaints.

Figure 1: Shows the right palatopharyngeaus pedunculated mass.

Figure 2: Right palatopharyngeus mass post excision and cauterization.

Discussion and Conclusion

Tuberculosis (TB) is an example of a chronic granulomatous systemic infection, which may affect any part of the body, including the oral cavity. Oral Tuberculosis lesions are relatively rare and pose a dilemma in diagnosis among clinicians. Oral Tuberculosis is an uncommon form of extrapulmonary TB. They are many form of oral TB presence. The most common is chronic unhealed oral ulcers [2]. However, mass arising from the posterior pillar is extremely far uncommon as we reported in this case.

Primary lesion begins when the Tuberculosis Bacilli are directly inoculated into the oral tissue of a person who has no acquired immunity to the disease. It is also suggested that entry of organism into the mucosal tissue could occur through a small break in the surface such as chronic ulcers [3]. The pathophysiology of primary inoculation into oral mucosa is not clearly proven scientifically and well understood.

Naturally, an intact mucosa provides good barriers to prevent direct invasion by bacilli. Saliva which has antibacterial properties, enzymes and tissue antibodies are part of natural "soldiers" acting as stronghold to prevent bacterial penetration. However, any break or loss of its natural barriers as a result of local trauma, chronic inflammation or poor oral hygiene may open the door for bacterial invasion into oral mucosa [4]. As reported by Ito., *et al*. that person who consume unpasteurized milk which has bovine tubercle bacilli can get oral TB in poor socio-economic environments [3].

Meanwhile, secondary infection is a consequence of either haematogenous or lymphatic spread. It usually coexists with pulmonary TB infection. TB may be transmitted via aerosolized droplets which may enter the lungs. Direct invasion into lung parenchymal can cause lung parenchymatous lesion such as lung abscess. After healing, bacilli may remain dormant for many years and may reactivate back as opportunistic infection causing secondary TB infection. The current case demonstrated a primary type of infection as the patient was free from Pulmonary Tuberculosis [5].

Oral TB may occur at any mucosal site. The most common sites reported are the tongue, labial mucosal, hard palate, gingivae followed by buccal mucosa. Tonsils, uvula and salivary gland may also be involved. Diagnosing the disease is very difficult and often appears as other clinical conditions. The common differential diagnosis for oral TB lesions includes recurrent aphthous oral ulcers, traumatic ulcerations, syphilis, deep fungal infection or potential malignant lesions such as lymphoma and oral squamous cell carcinoma (SCC) [6]. In addition, the existence of granulomas on histological findings leads to consideration of granulomatous diseases like TB, sarcoidosis and cryptococcosis. The presence of acid-fast bacilli can confirm the diagnosis of TB. However, only a small percentage showed stain positive, approximately 8% [7]. To overcome this, we should proceed with TB culture on the Lowenstein-Jensen medium.

The treatment modalities for oral TB is the same as for pulmonary TB. It consists of 6 months of oral anti-TB medications [8] and needs close monitoring to observe any side effects of oral anti-TB initiation. All TB cases, either extra-pulmonary or pulmonary TB, need to be notified to authorities to allow necessary documentation and contact tracing to be done if required. It is the legal responsibility of all medical personnel in Malaysia to record data and inform the authorities.

This case aims to yield some shine on the clinical course of the disease and its varied presentations. As ENT surgeons, it is obligatory to recognise such presentations for prompt diagnosis and making an effective treatment plan. Oral cavity Tuberculosis should be appraised as a potential differential diagnosis of oral mass lesion.

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