Isolated Tubercular Vocal Cord Polypoidal Mass

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Abstract: Laryngeal tuberculosis is a very rare form of tuberculosis and is mostly secondary to pulmonary tuberculosis. Patients usually present with hoarseness of voice and other nonspecific constitutional symptoms. In this study, we present an atypical case of primary vocal cord polypoidal mass with tuberculosis. A 48 year old man presented with hoarseness of voice and dysphagia of four months duration. Laryngoscopic study showed isolated polypoidal mass of vocal cord and biopsy of the lesion showed granuloma with caseous necrosis. Chest x-ray was normal. The patient was treated with standard regimen of tuberculosis and was cured after 12 months of anti tubercular therapy. In conclusion the Laryngeal tuberculosis should be considered in the differential diagnosis of patients with hoarseness. In order to reach definitive diagnosis microbiological and histopathological samples should be taken by biopsy and prompt anti tubercular treatment should be started.

Keywords: Laryngeal Tuberculosis, Vocal cord, Hoarseness.

INTRODUCTION

Laryngeal tuberculosis is a very rare form of tuberculosis and is mostly secondary to pulmonary tuberculosis. Patients usually present with hoarseness of voice and other nonspecific constitutional symptoms. In this study, we present an atypical case of primary vocal cord polypoidal mass with tuberculosis. A 48 year old man presented with hoarseness of voice and dysphagia of four months duration. Laryngoscopic study showed isolated polypoidal mass of vocal cord and biopsy of the lesion showed granuloma with caseous necrosis. Chest x-ray was normal. The patient was treated with standard regimen of tuberculosis and was cured after 12 months of anti tubercular therapy. In conclusion the Laryngeal tuberculosis should be considered in the differential diagnosis of patients with hoarseness. In order to reach definitive diagnosis microbiological and histopathological samples should be taken by biopsy and prompt anti tubercular treatment should be started.

CASE REPORT

A 48 years old man presented to our hospital with chief complaints of hoarseness and dysphagia for a duration of four months. He had no history of cough or expectoration. The patient was non smoker and with no history of alcohol intake. There was positive family history of tuberculosis or any other chronic illness.

On general physical examination there was no cervical lymphadenopathy. There were no scars or sinuses in the neck. Indirect laryngoscopy had shown a nodular lesion on bilateral vocal fold (figure 1).

Fig 1: Vocal cord lesion at the time of presentation

Vocal cords were bilaterally mobile. The chest x-ray was normal. PPD test showed 15 mm indurations after 48 hours. After age related physician fitness and pre anesthetic check up, the patient underwent MLS under general anesthesia and biopsy was taken from vocal cords.
The histopathological examination revealed biopsy tissue showing diffuse infiltration by lymphocytes, plasma cells, occasional polymorphs along with epitheloid granulomas, langhans giant cells and caseous necrosis (figure 2). Histopathologic findings confirmed tuberculosis as the cause of his hoarseness and he was treated with standard regimens of therapy.

A standard 12 month treatment with a combination of isoniazid, rifampicin, pyrazinamide, and ethambutol was started. The follow up after treatment showed resolution of the symptoms and improvement of the mass (figure 4).

**DISCUSSION**

Laryngeal tuberculosis is a granulomatous disease of the larynx and usually been results from pulmonary tuberculosis (PT). It may cause hoarseness, dysphagia and odynophagia. The granulomatous lesions may involve all parts of the larynx due to haematogenic and lymphatic spreading of the mycobacteria [4]. The effective use of isolation and the advances of antituberculous chemotherapy have led to a decrease in the incidence of tuberculosis. Albeit, the presence of Acquired Immuno Deficiency Syndrome (AIDS) or other immunosuppressive diseases and long-term use of corticosteroid drugs may result in the increased incidence of tuberculosis [5]. In larynx, the commonest parts involved are the vocal cords and the least affected is the epiglottis [6]. Laryngeal tuberculosis may be categorized to ulcerative lesions, nonspecific inflammatory lesions, polypoid lesions and ulcer fungative mass lesions [7]. Laryngeal tuberculosis should be considered in the differential diagnosis of patients with hoarseness with or without pulmonary involvement in endemic regions of tuberculosis and in poor socio-economic group of population.

**CONCLUSION**

Laryngeal tuberculosis should be considered in the differential diagnosis of patients with hoarseness. In order to reach definitive diagnosis microbiological and histopathological samples should be taken by biopsy and prompt anti tubercular treatment should be started as the response of patients with laryngeal tuberculosis to anti tubercular medication is very rapid and effective.  

**REFERENCES**
