

Isolated Tubercular Vocal Cord Polypoidal Mass**¹Dr. Mohit Srivastava, ²Dr. Sushant Tyagi, ³Dr. Lalit Kumar**¹Assistant Professor, Department of ENT, SIMS, Hapur²Senior Resident, Department of ENT, SIMS, Hapur³Junior Resident, Department of ENT, SIMS, Hapur

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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.

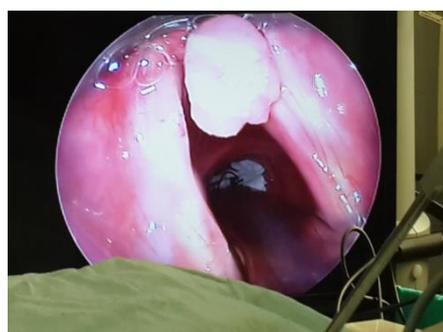
INTRODUCTION

Tuberculosis still remains a serious world health problem. Each year more than eight million people worldwide contract tuberculosis, and more than two million people die from the disease [1]. Involvement of larynx in tuberculosis occurs as secondary to pulmonary tuberculosis. Primary involvement of larynx is rare. Exact mode of transmission from the lungs is not known. It is believed that contact with sputum containing tubercle bacilli plays an important role. The occurrence of tuberculosis of larynx has greatly decreased as a result of improvement in public health care and development of effective anti tubercular chemotherapy. These patients usually present with the symptoms of cough, hoarseness of voice, pain in throat, dysphagia, haemoptysis which simulate malignancy and other granulomatous infections of larynx [2]. Lesions vary from erythema to ulceration and masses resembling carcinoma. Direct laryngoscopy and biopsy are mandatory to establish a definitive diagnosis [3].

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.



Fig 2: MLS and biopsy from lesion under GA

The histopathological examination revealed biopsy tissue showing diffuse infiltration by lymphocytes, plasma cells, occasional polymorphs along with epithelioid granulomas, Langhans giant cells and caseous necrosis (figure 2). Histo pathologic findings confirmed tuberculosis as the cause of his hoarseness and he was treated with standard regimens of therapy.

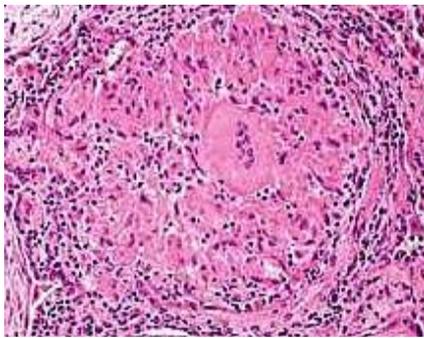


Fig 3: Histo pathologic examination of sample of the right vocal cord.

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).



Fig 4: immediate post operative image

DISCUSSION

Laryngeal tuberculosis is a granulomatous disease of the larynx and usually 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 ulcero 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.

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