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Laryngeal Tuberculosis or Malignancy: A Masquerade

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ABSTRACT

Laryngeal tuberculosis (TB) is not a very common laryngeal pathology, therefore it can be easily missed. Laryngeal TB and Cancer of Larynx can have similar clinical presentations. Here we discuss a case of a 57-year-old female presenting in outpatient department with complaints of Hoarseness of voice since 6 months and shortness of breath since 3 months. Patient was further evaluated and diagnosed as a case of laryngeal tuberculosis. Treatment was started with fixed dose anti tubercular drugs and patient showed improvement on follow up.

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Introduction

Tuberculosis (TB) is known as a causative agent of Mycobacterium Tuberculosis, which is one of the leading causes of death due to infection in adults worldwide (1).

Inhalation of droplets contaminated with M. tuberculosis which deposits in the lungs leads to the following outcomes:

- Clearance of the organism
- Primary disease
- Latent infection

Lung is the most frequently affected organ; TB can set on any organ. A significant portion of the TB cases are extrapulmonary. Of these, the ones involving the ear, nose and throat may manifest as cervical lymphadenopathy, otitis media, tubercular laryngitis, tubercular pharyngitis. It has been observed that TB of other organs can mimic other diseases, therefore delaying the diagnosis can be troublesome.

Laryngeal TB was earlier a common complication in advanced Pulmonary TB but now with the onset of Anti-Tubercular Therapy it has become a rare occurrence. The pattern and clinical symptoms of Laryngeal TB have also changed.

Literature data indicates that Laryngeal TB constitutes less than 2% of extrapulmonary TB cases (2,3). The correct incidence of Laryngeal TB for patients with Pulmonary TB is difficult to be determined because patients with Pulmonary TB are generally subjected to systematic Otorhinolaryngologic evaluation (4,5).

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Here, we report a case of a 57-year-old immunocompetent female with laryngeal Tb with Pulmonary involvement.

Case Report

A 57-year-old female, non-smoker, immunocompetent, Non-Diabetic, Non-Hypertensive came to the Chest OPD with complaints of Hoarseness of voice for 6 months with shortness of breath since 3 months and on and off dry cough. There was no complaints of fever and weight loss. On general physical examination she was well oriented to time, place and person, well-nourished with no lymphadenopathy or any other positive sign. Her hematological and bio-chemical investigations were within normal limits. She tested negative for human immunodeficiency virus. A chest radiograph showed patchy opacities in right lower zone (figure1). HRCT of the thorax (done outside) was suggestive of patch of consolidation in the antero-basal segment of the Right lower lobe. Patient underwent bronchoscopy suggestive of oedematous arytenoids, which was occluding the Endo-larynx (figure2). Bronchoscopy was thus deferred. further ENT evaluation and opinion was sought. She started to develop stridor for which she underwent Tracheostomy to secure the airways followed by a Laryngeal Endoscopy which was suggestive of oedematous arytenoids and a biopsy was performed. The Histopathology was suggestive of ulceration with chronic granulomatous inflammation.

She was thus started on fixed dose regimen of anti-tubercular therapy. Patient was decannulated after 2 months . On repeat laryngeal endoscopy done in 2 months (figure3) there was marked improvement in oedema. Follow up chest Imaging also showed marked improvement and came up to be normal in 6 months of treatment .

Discussion

The most common granulomatous disease of the larynx is TB of Larynx (6). Laryngeal TB is of two types: a primary type which is without pulmonary involvement or a secondary type which is with Pulmonary involvement. Mode of transmission of Mycobacterium can be hematogenous , lymphatic or Bronchogenic spread from the lungs.

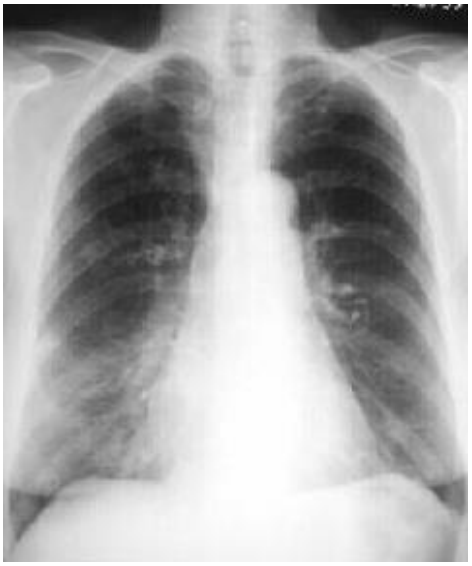

Figure 1. Consolidation in right lower zone.

Patients usually complain of hoarseness of voice and odynophagia (7-9). Patient also complains of shortness of breath, stridor, cough and haemoptysis (10). Our patient had hoarseness of voice and dyspnea and later developed stridor.

Laryngoscopy is usually nonspecific as lesions of laryngeal TB may appear similar to that of leukoplakia, laryngeal polyps, ulcers and laryngeal cancer (11).

According to Shin et al., the findings of laryngealtuberculosis may be categorized into four groups: (a) whitish ulcerative lesions (40.9%), (b) nonspecific inflammatory lesions (27.3%), (c) polypoid lesions (22.7%), and (d)ulcero-fungative mass lesions (9.1%) (12).

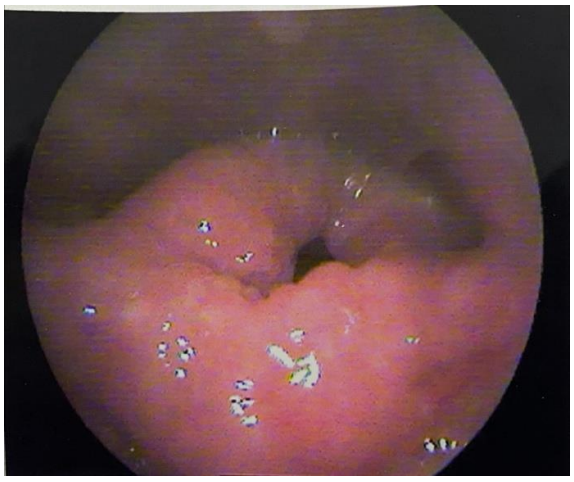

Figure 2. Bronchoscopy view- Oedematous arytenoids.

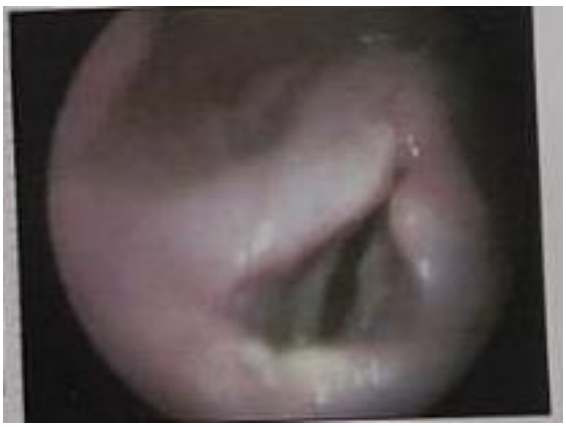

Figure 3 .Laryngoscopy view- after 2 months of treatment showing reduced oedema.

This patient had inflammatory changes. Patients that belong to regions with high TB incidence and present with complaints of odynophagia, weight loss and hoarseness of voice should be investigated for Laryngeal TB so as to prevent delay in diagnosis and treatment.

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