

## Tubercular laryngitis: A case report and review literature

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### Abstract

Tubercular laryngitis is the most common granulomatous diseases of larynx. ENT manifestation of tuberculosis was tubercular laryngitis, which was more common in patients diagnosed of pulmonary tuberculosis especially defaulters of previous ATT therapy and relapse cases. This is a case report of tubercular laryngitis in 57 years old female patient which was clinically and histopathologically diagnosed case of tubercular laryngitis, and treated by multidrug antituberculous chemotherapy without interruption of any dose.

**Keywords:** Tubercular laryngitis, Histopathologically, Multidrug antituberculous chemotherapy.

### Introduction

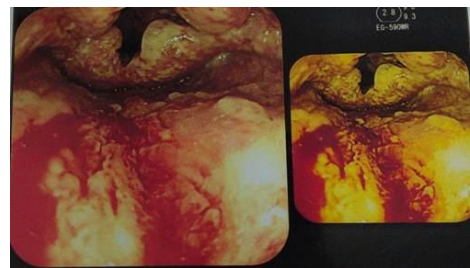
It is the most common granulomatous diseases of larynx.<sup>1</sup> The most common ENT manifestation of tuberculosis was tubercular laryngitis, which was more common in patients diagnosed of pulmonary tuberculosis especially defaulters of previous ATT therapy and relapse cases. Laryngeal tuberculosis is a rare form of extra pulmonary TB. Currently its incidence is estimated to be less than 1% of all TB cases.<sup>2,3</sup> Its clinical features include odynophagia cough, and hoarseness of voice.<sup>4</sup> Laryngeal TB is highly contagious and misdiagnosis can pose a serious risk to the public health.<sup>5</sup>

### Case Report

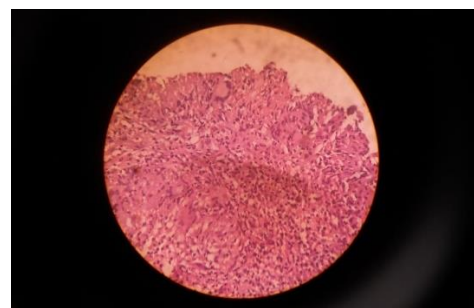
A 57 years female patient presented to our ENT OPD with complains of difficulty in swallowing with progressive hoarseness, cough and breathlessness. She had no complains of fever, night sweating or weight loss.

She never smoked and had no medical history of diabetes mellitus, hepatitis, or tuberculosis. On physical examination, she was having thin body built. There was no pallor but having cervical lymphadenopathy. On systemic examination were normal. On local examination, the oral cavity and posterior pharyngeal wall were found to be normal. Routine blood investigations of the patient are within normal limit and tests for Human Immunodeficiency Virus (HIV) status, Hepatitis-C and Hepatitis-B Virus (HBV) Surface Antigen were found to be negative. On Indirect laryngoscopes, the overhanging of epiglottis other structures not visible. On FOL extensive growth of febrile nature involving uvula, posterior pharynx, epiglottis and arytenoids, true vocal cords are poorly visualized. For confirmation of the diagnosis we take biopsy tissue under local anaesthesia and tissue send for HPE.

On Microscopic examination section show one bit lined by hypertrophied and acanthotic stratified squamous epithelium with other bits displaying numerous epithelioid granulomas comprising of epithelioid cells, histiocytes and Langhan's type of giant cells. Marked granulation tissue comprising of neutrophilic infiltrate and proliferating capillaries also seen. However there is no evidence of malignancy in the biopsy received. Z-N stain show acid fast bacilli. Biopsy from growth involving uvula, posterior pharynx and epiglottis suggestive of tubercular laryngitis.



**Fig. 1: Showing fiberoptic laryngoscopic picture**



**Fig. 2: Showing microscopic picture of tubercular laryngitis with langerhan's giant cell and granuloma**

### Discussion

According to Farooq A et al<sup>6</sup> laryngeal tuberculosis is almost always secondary to pulmonary tuberculosis.

In most cases, it is a result of contamination by sputum containing acid-fast bacilli. Laryngeal tuberculosis is usually seen in the 3rd to 4<sup>th</sup> decade in males which has been supported by various studies like Nimesh P. Parikh (1987).<sup>7</sup> Earliest findings are said to be red, unilateral, congested vocal cord with pinpoint nodules lying under and involving mucosa. Intervening epithelium is quite red and shows tissue loss. This is usually followed by mouse bitten appearance of vocal folds going on to develop edematous, red, enlarged epiglottis and may later lead to vocal cord fixation. The vocal cords are the most commonly affected sites(50-70%) which are followed by false cords(40-50%), epiglottis, aryepiglottic folds, arytenoid, posterior commissar and sub-glottis (10-15%).<sup>10</sup> In our case involved case were uvula, posterior pharynx, epiglottis and arytenoids, true vocal cords are poorly visualized. It should be kept in mind that tuberculosis and malignancy of larynx may co-exist.<sup>4</sup> So, biopsy not only diagnoses tuberculosis, but also excludes malignancy as early as possible. Multidrug antituberculous chemotherapy is the mainstay of treatment leading to an excellent response in most cases and resolution of laryngeal lesions in 4-8 weeks.<sup>8,9</sup> However untreated laryngeal TB may lead to laryngeal stenosis and cricoarytenoid fixation that may require surgical correction.<sup>9</sup>

In our case report confirmation of diagnosis of tubercular laryngitis was made by histopathological and microscopic findings biopsy tissue of larynx.

## Conclusion

Tubercular laryngitis is a pathology that can be treated by multidrug antituberculous chemotherapy without interaption of any dose. Early diagnosis and full course of chemotherapy is mainstay for proper treatment.

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