



ISSN NO. 2320-5407

Journal Homepage: -[www.journalijar.com](http://www.journalijar.com)

## INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)

Article DOI:10.21474/IJAR01/10019  
DOI URL: <http://dx.doi.org/10.21474/IJAR01/10019>



INTERNATIONAL JOURNAL OF  
ADVANCED RESEARCH (IJAR)  
ISSN 2320-5407  
Journal Homepage: <http://www.journalijar.com>  
Journal DOI:10.21474/IJAR01

### RESEARCH ARTICLE

#### TURBAN EPIGLOTTITIS MASQUERADING AS ACUTE LARYNGOSPASM.

**Manav Manchanda, Sunil Nagar, Priyadarshi Jitendra Kumar and Manu Shangle.**

Department of Respiratory medicine, sleep medicine and Critical Care Medicine, ASIAN Hospital, Sector 21A, Faridabad, India.

#### Manuscript Info

##### Manuscript History

Received: 08 September 2019

Final Accepted: 10 October 2019

Published: November 2019

##### Key words:-

turban epiglottitis, laryngospasm, granulomatous, mouse eaten.

#### Abstract

We are discussing a case of turban epiglottitis who presented to emergency as acute onset stridor associated as Breathlessness, on examination tachypnea (RR>28/m), mild desaturation (< 92%). First diagnosis was acute laryngospasm in view of biphasic stridor. Patient was for evaluated further, finally concluding to the diagnosis of turban epiglottitis. On systemic steroid both signs and symptoms resolved sequentially. This literature is to add to the knowledge to keep in consideration of this modality also while attending any patient with recent history of sputum positive status or likely diagnosis of PTB.

*Copy Right, IJAR, 2019.. All rights reserved.*

#### Introduction:-

Tuberculosis is regarded as one of the world's deadliest diseases:

1. TB is one of the 10 most leading cause of death worldwide with one by fourth of the world's population is infected with TB.
2. In 2017, 10.0 million (range, 9.0-11.1 million) people around the world became sick with TB disease. There were 1.3 million (1.2 to 1.4 million) TB-related deaths worldwide.
3. TB is a leading killer of people who are HIV infected 9% of the total deaths.

As per global report 2018 a total of 9,105 TB cases (2.8 cases per 100,000 persons) were reported in the United States in 2017. Every year approx. 220,000 deaths are reported due to TB in India and it has cost Indian economy more than USD 340 billion. This is an epidemic health problem. Easily communicable diseases by coughing or spitting in open. India bears a disproportionately large burden of these diseases when compare to world, even though it is still under reported because of low awareness or social stigma. Ending TB requires maintaining and strengthening of current TB control policies and programme while increasing efforts to identify and treat latent TB infection among high-risk populations. Acute epiglottitis is one of the many manifestations of tuberculosis in an individual both as primarily diseases or secondary to Pulmonary tuberculosis. So with this case report we are trying to spread awareness that every case of epiglottitis must also be worked up for Tuberculosis as possible diagnosis. Laryngeal tuberculosis can occur irrespective of the immunization status and result of tuberculin test could be negative.

#### Case Report

A 62-year-old male presented in the Emergency department complaining of a two day history of dysphagia, dysphonia, hoarseness of voice and a sore throat; that rapidly evolved to stridor and dyspnoea. He claimed for

**Corresponding Author:-Manav Manchanda.**

Address:- Department of Respiratory medicine, sleep medicine and Critical Care Medicine, ASIAN Hospital, Sector 21A, Faridabad, India.

approximately 10 kg weight loss in past few months. There was no history of trauma or foreign body intake. His past medical history was non significant. He was an ex smoker for 20years ago.

Initial clinical evaluation revealed a biphasic stridor with laboured breathing. The respiratory rate was 28/min with 92% SpO<sub>2</sub> on room air. He was plethoric with tachycardia (116 bpm), hypertensive (110/70 mmHg) and pyretic (101 °F). Chest auscultation was bilateral rhonchi. Soft palate and the oropharynx were inflamed. Oral cavity was normal with good dental hygiene.

The patient was admitted in ICU and direct laryngoscopy demonstrated an oedematous epiglottitis false vocal cords were so prominent and swollen that they completely occluding the opening of lower airway, orotracheal tube. Patient was treated conservatively with dexamethasone and antibiotics. Later BAL AFB smear was 3+, CBNAAT was positive: MTB detected Rif. Sensitive. ATT was started as per weighth band along with RT feed (as per protocol). Later DL scopy was done after 7 days nasal endoscopy was done to evaluate improvement and vocal cord were easily visible. Gradually steroids were tapered off.

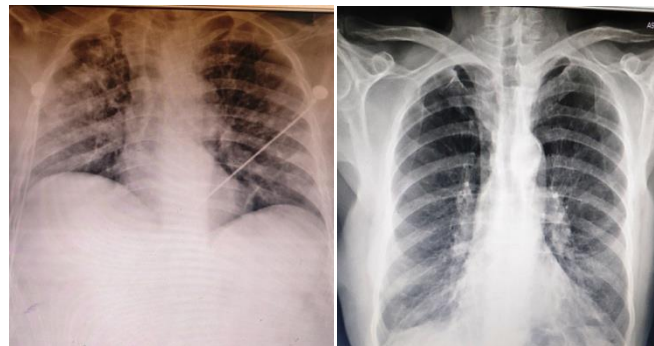
On discharge (25th day of hospital stay), there was no dysphagia, dysphonia or dyspnoea. The edema of the larynx was fully resolved and vocal cords were visible. Patient was tolerating normal diet orally well, and no ATT ADR was seen.

**Figure 1:-**Epiglottitis “Turban like” on day1  
steroids and ATT. Vocal cord and uppertracheal

**Figure 2:-**DL-scopy done day 15 after of treatment with systemic  
opening clearly visible.



**Figure 3:-**XRAY neck lateral view.



**Figure 4:-**CXR on day 1 and day 30.

### Discussion:-

Tuberculosis is the most deadly assassin ever known to human kind which will slowly and most dreadfully kill a person by choking or drowning him to death sometimes in his own pool of blood. Acute epiglottitis is a relatively uncommon as a disease. Because of the loose and more vascular mucosa of the epiglottic region inflammation may rapidly progress to edema and vascular engorgement resulting in central airway obstruction and even sudden

suffocating death. Make a doctrine to always rule out acute epiglottitis suspected in all those patients who present to you with symptoms out of proportion to examination finding of pharynx with history of sore throat and odynophagia.

Paediatric vs. adult epiglottitis in adult the progression is more gradual and conservative management can be contemplated in selected patients. Seasonal variation and acute onset stridor are more often seen in paediatric age groups.

Tuberculosis of the larynx [1,2] can occur primarily as a direct infection of laryngeal mucosa followed by edema and granuloma formation or secondarily as a complication of active or inactive pulmonary tuberculosis. The most common ENT manifestation of tuberculosis is tubercular laryngitis[3] specially seen in already diagnosed cases of Pulmonary Tuberculosis or notorious one like defaulter or relapse cases. Adult's laryngeal tuberculosis is mostly secondarily to already infect pulmonary tuberculosis [4] while in children it may be a primary affair with no pulmonary disease and their chest X-rays at presentation may be normal. Laryngeal tuberculosis can occur irrespective of the old immunization status and result of tuberculin test could be falsely negative.

The subepithelial tubercle granuloma has central area of caseating necrosis ringed by multiple epitheloid cells with mononuclear cells on their peripheries. Fibrosis then starts at the periphery of tubercles and replaces the tubercle. A secondary infection usually causes perichondritis, ulceration, and chondritis deformity due to inflammation and cricoarytenoid joint destruction. Lymphatic obstruction would lead to Oedema of epiglottis and arytenoids. Following which epithelial hyperplasia, papillary granulomatous masses, fibrosis and eventually stenosis will complete the picture. Diagnosis is clinched by clinical examination and investigations for tuberculosis either clinical, microbiological or radiological.

Direct Laryngoscopy showed a retroflexed epiglottis obstructing the glottis with edematous arytenoids and aryepiglottic folds heaping and crusting, swollen or "turban" epiglottis. In later stage edema, granulomatous masses and finally ulceration with vocal cord fixation or paralysis may results in sequale. Sometimes just Laryngeal wash followed by Genexpert like our case would be enough or Laryngeal biopsy may be required to distinguish from other granulomatous conditions like ANCA associated vasculitides and malignancy. Treatment with antituberculous drugs, with adjuvant steroids short course shows rapid response and prompt relief of symptoms. Rarely surgical intervention is required for airway obstruction in sequale cases.

### **Conclusion:-**

This literature is to add to the knowledge to keep in consideration of this modality also while attending all patient with recent history of sputum positive status or likely diagnosis of PTB.

### **References:-**

1. Morales PJM, Padilla PM, Diaz SMA, et al. Laryngeal tuberculosis, an incidence between 1994 and 2004. *And Otorrinolaringol Ibero Am* 2006; 33(6):591-8.
2. Coscaron BE, Santa Cruz RS, SerradillaLJM. Tuberculousepiglotitis an atypical form of laryngeal tuberculosis. Presentation of a case and review of literature. *An Otorrinolaringol Ibero Am* 2005; 32(1):55-63.
3. Krecicki T, Zalessska-Krecicta M, Zatonski T, et al. Laryngeal tuberculosis. *Lancet Infect Dis* 2004(1):57.
4. S Kumar, Tuberculosis in Otorhinolaryngology. In: SK Sharma. *Text Book of Tuberculosis*: Jaypee; 4<sup>th</sup> edition.