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## Tuberculous retropharyngeal abscess without cervical spine TB

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## ABSTRACT

Tuberculous retropharyngeal abscess is a rare presentation. It is present in adults usually due to involvement of cervical spine by tuberculosis. Retropharyngeal space usually gets involved in children due to pyogenic organisms or secondary to trauma. Here is a case of tuberculous retropharyngeal abscess in an adult female, with pulmonary tuberculosis. The patient was not having tuberculous involvement of cervical spine and was managed surgically by aspirating the retropharyngeal abscess transorally and AKT Category I.

## 1. Introduction

Retropharyngeal abscess is a rare presentation, even in the presence of extensive pulmonary tuberculosis[1]. It occurs mainly due to pyogenic infection seen mostly in children. In the case of tuberculous retropharyngeal abscess, it is usually due to spinal tuberculosis[2]. Here we intend to present a case of tuberculous retropharyngeal abscess in pulmonary tuberculosis without having spinal tuberculosis.

## 2. Case report

A–29–year old female, presented in ENT outpatient department with chief complaints of difficulty in swallowing for solids, with progressive swelling on the left side of neck, for about 15 days. There was no history of pain in throat, fever and any trauma to neck. On examination, the patient was of average built with mild inspiratory stridor and mild fever. Cervical lymphadenopathy was present on the left side with two to three matted lymph nodes. There was a central area of fluctuation and it was not tender to touch. There was no tenderness over cervical spine. Oropharyngeal examination showed a cystic swelling on

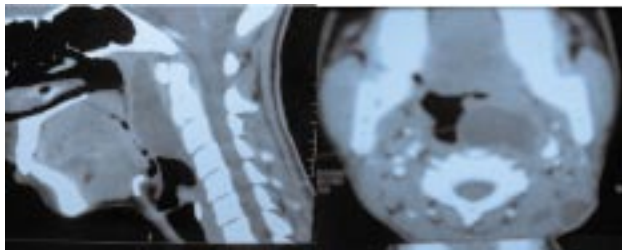
posterior pharyngeal wall more on the left side behind the left tonsillar area. (Figure 1) Indirect laryngoscopy showed fullness of left lateral pharyngeal area without compromising the airway. Rest of the larynx was normal. On history it was known that the patient is a diagnosed follow up case of smear negative pulmonary tuberculosis with tubercular left cervical lymphadenitis and is on category I regimen comprising of four drugs i.e rifampicin, isoniazid, ethambutol and pyrazinamide thrice weekly for two months followed by rifampicin and isoniazid thrice weekly for four months as per Revised National Tuberculosis Control Program guidelines. Patient showed improvement on serial chest X–rays but cervical lymph node swelling was persisting with abscess formation for which antigravity aspiration of pus was done. Investigations revealed Hb 11 gm%, TLC– 10000/cmm DLC–N 62 L34 E 2 M 2, platelets adequate, ESR 26 mm/1st hour, fasting blood sugar 80 mg%. ELISA for HIV 1 and 2 were negative. Computed tomography scan of neck showed retropharyngeal abscess on the left side (Figure 2) and cervical lymphadenopathy with central necrosis on the same side, without any pathology in cervical spine. USG neck revealed the same, abdominal USG was normal. As the patient was not having respiratory distress, under all aseptic precaution and under local anaesthesia, transoral aspiration of abscess was done with a wide bore needle and about 55 mL of thick pus was aspirated in two sittings. Routine gram stain and culture of pus showed no growth whereas mycobacterial stain and culture sensitivity

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came positive for *Mycobacterium tuberculosis*. Patient showed considerable improvement at the time of discharge.



**Figure 1.** Intraoral view showing retropharyngeal abscess on left side.



**Figure 2.** Computed Tomography neck showing retropharyngeal abscess without damage to cervical spine and abscess in cervical lymph node on left side.

### 3. Discussion

Historically, retropharyngeal space abscesses have largely been considered to be a disease of infancy, usually resulting from abscessed lymph nodes draining infection of ear, nose or throat. More recently, however, Barratt and associates have suggested that the incidence of this entity may be higher in the adult population than previously thought. In addition to spread from acute infections of the ear, nose and throat, retropharyngeal abscesses may result from regional trauma, such as foreign body ingestion, oral endo-tracheal intubation and endoscopic procedures<sup>[3]</sup>. A tuberculous retropharyngeal abscess in adults is usually secondary to tuberculous involvement of the cervical spine<sup>[4]</sup>. The probable route of spread to the retropharyngeal space is via the lymphatics, to a persisting retropharyngeal lymph node. In rare cases, the abscess may be due to haematogenous spread from pulmonary tuberculosis and patient may present with stridor and dysphagia<sup>[5]</sup>. In the above mentioned patient, the retropharyngeal abscess was probably due to haematogenous spread from pulmonary tuberculosis as there was no evidence of spinal tuberculosis. A retropharyngeal abscess can be drained safely via a transoral route or by an

external route<sup>[6]</sup>. Aggressive treatment with antitubercular drugs and early surgical intervention is necessary to prevent further complications such as mediastinitis and involvement of the great vessels<sup>[7]</sup>. Transoral drainage of retropharyngeal abscess is a well established treatment of retropharyngeal abscess<sup>[8,9]</sup>. We treated our patient by doing aspiration of abscess by transoral route under local anesthesia (10% xylocaine spray) without tracheotomy. About 40 mL pus was aspirated using 16G wide bore needle in first aspiration and 15 mL was aspirated after 48 hrs in second aspiration. Patient was advised to continue antitubercular treatment and patient showed obvious improvement before discharge. Tuberculous retropharyngeal abscess can present as a rare site of extrapulmonary spread of pulmonary tuberculosis, even in absence of tubercular cervical spine. Aspiration of retropharyngeal abscess via oral route is safe and an easy method of surgical management.

### Conflict of interest statement

We declare that we have no conflict of interest.

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