

## Case Report

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# Chronic retropharyngeal abscess

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### Abstract:

*Introduction: Chronic retropharyngeal abscess can occur in the adults as well as in children. It is usually due to tuberculous infection of the cervical spine as the pus directly spreads through the anterior longitudinal ligament into the retropharyngeal space.*

*Case report: We report a case of chronic retropharyngeal abscess in a 60-year-old woman who presented with throat pain and dysphagia. On examination there was bulging of the posterior pharyngeal wall and also right sided neck swelling. She was treated by external drainage of abscess under local anaesthesia and she recovered well with anti-tubercular drugs.*

**Key words:** Chronic retropharyngeal abscess; tuberculosis

### Introduction:

Chronic retropharyngeal abscess can occur in any age. It is usually due to tuberculous infection of the cervical spine as the pus directly spreads through the anterior longitudinal ligament into the retropharyngeal space.

In adults it may also results from external trauma in neck, iatrogenic instrumentation such as esophagoscopy, orodental infections and foreign bodies<sup>1</sup>. Other causes

such as tuberculosis, syphilis and vertebral fractures must be ruled out. Patients may present with fever, odynophagia, dysphagia, dyspnoea, drooling, cervical rigidity (torticollis), a 'hot potato' or hyponasal voice, and sepsis<sup>2</sup>.

### Case report:

A 60-year-old woman presented at ENT – Head & Neck Surgery Department, Anwer Khan Modern Medical College, Road 8, Dhanmondi RA, Dhaka with throat pain and dysphagia. She also had on-off fever. She had no other symptoms. She has a family history of tuberculosis. On examination there was bulging of the posterior pharyngeal wall and a right sided external neck swelling. An x-ray soft tissue of the neck, lateral view was obtained which showed widening of the prevertebral soft tissue shadow with mild erosion of the cervical vertebra 4. An MRI scan demonstrated a well circumscribed hyperintense lesion in the retropharyngeal space consistent with a retropharyngeal abscess (Figure 1: a and b).

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**Figure 1:** (a and b) MRI scan.

She was managed with IV antibiotics and an external drainage of the abscess was done under local anaesthesia. An incision was made along the anterior border of the sternomastoid muscle and the dissection continued up to the deep cervical fascia. Pus came out after opening the fascia. Tissue from abscess cavity was sent for histopathology which revealed tuberculosis. She made an uneventful post operative recovery. She was started on anti-TB medications in the post operative period and recovered well.

#### **Discussion:**

The potential space in between the prevertebral and the buccopharyngeal fascia is known as the retropharyngeal space or space of Gillette. The chronic type of retropharyngeal abscess forms due to tuberculosis of a cervical vertebra and is therefore behind the prevertebral fascia, central in position and it bulges into the pharynx in the midline<sup>3</sup>. In adults, a retropharyngeal abscess is likely to be due to tuberculous infection of the spine which is the commonest site of skeletal tuberculosis<sup>4-6</sup>.

In most instances, a diagnosis is made by clinical suspicion with proper history and examination. A lateral neck film showing widening of the prevertebral space was the most important diagnostic tool<sup>7</sup>. It may also show loss of the normal cervical lordosis with straightening of the cervical spine and the presence of air or foreign body in the soft tissues<sup>2</sup>. But in a study, it's a method of choice for only 22%<sup>8</sup>. For many, neck films are used for screening purposes only<sup>9-10</sup>. CT/MRI scan is the investigation of choice as it provides additional details<sup>5</sup>. It allows identification of the clinical stage of the infection, bone erosion and thus differentiates cellulitis from an abscess. However one large series have found that CT has a low sensitivity (43%) and specificity (63%) in differentiating RPA from cellulitis<sup>4</sup>. It is also useful in defining the vascular structures of the neck and their potential involvement, as well as delineating exactly which neck spaces are involved, thus localizing the lesion before surgical drainage<sup>2</sup>. An MRI can be chosen as a diagnostic modality when a diagnosis other than retropharyngeal abscess is suspected such as neoplasm<sup>5</sup>.

The most dreaded complications of retropharyngeal abscess are airway compromise, rupture of abscess with aspiration of purulent material, descending mediastinitis and septicaemic shock<sup>6</sup>.

For chronic retropharyngeal abscess external drainage with incision along the anterior border of the SCM muscle is necessary. The abscess is then opened between the carotid sheath and the inferior constrictor muscle<sup>5</sup>. If the abscess is high in the neck, it is better approached from behind the carotid sheath through an incision behind the sternomastoid muscle<sup>3</sup>. Therefore criteria for external drainage were a clinical or radiological suspicion of spread of the abscess across fascial planes to include other deep neck compartments<sup>2</sup>. Other indications include suspected tubercular abscess, larger abscesses, significant inferior extension, and when there are signs of complications<sup>11</sup>. Anti-tubercular drugs along with cervical collar improved the patient's condition. In this case cervical collar was not prescribed as the lesion in vertebra was mild.

#### Conclusion:

The possibility of a chronic retropharyngeal abscess should be considered in patients presenting with dysphagia, neck discomfort, pyrexia and external neck swelling. It is a rare and yet serious disease that must be recognized to avoid potentially lethal complications. It is usually due to tuberculosis of the cervical spine and may need external drainage when it's a large abscess involving other fascial planes of the neck.

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