INTRODUCTION
Retropharyngeal abscess may present as an acute pyogenic infection in children or as a chronic condition in adults. Acute abscess is due to suppuration of retropharyngeal lymph node of Gillette. Chronic abscess on the other hand is either due to tuberculous involvement of retropharyngeal nodes in which case it is limited by a midline fibrous raphe to one side. Alternately it may be due to caries spine eroding into the retro-pharyngeal space, in which case it may not be limited to one side of midline.

Retropharyngeal abscess has been reported to present mostly with dyspnoea, odynophagia and several other features most of which have been reported in literature. However, its association with nerve lesions has been rarely reported. The only association of retropharyngeal abscess with any nerve lesion described in literature so far is twelfth nerve palsy,1 therefore, this association with Horner's syndrome may well have been reported for the first time.

CASE REPORT
A male aged 70 years reported with 2 months history of progressively increasing odynophagia, dyspnoea, anorexia and symptoms of Horner’s syndrome. For the last one week, odynophagia had become so severe that patient was unable to take oral feed and, therefore, NG tube had to be passed through which high caloric feeding was then started. He had also noticed a fluctuant swelling on left side of neck anterior to sternomastoid muscle. Out of all the presenting symptoms, Horner’s syndrome and odynophagia were the most dominant feature. He had a previous history of pulmonary tuberculosis few years ago, for which he had taken full length anti-tuberculosis treatment, although he did not remember the regime taken.

On ENT examination, the swelling was visible in the posterior wall of pharynx. Indirect laryngoscopy revealed pooling of saliva in both valecullae. Laryngeal inlet was not visible due to bulging posterior pharyngeal wall. Neck examination revealed a fluctuant swelling on left side of neck with point of maximum bulging anterior to sternomastoid. Urgent investigations and surgical intervention was planned.

Blood CP showed raised lymphocyte count and grossly raised ESR. X-Ray chest showed healed calcified lesions of pulmonary tuberculosis. Lateral view of neck in plain x-ray showed resorption of apposing bodies if C5 and C6 due to central tuberculosis of cervical spine (Figure 1). Barium swallow showed widening of pre-vertebral soft tissue causing narrowing of the oro-and hypopharyngeal airway. Interesting findings on CT scan were multiple pockets of hypodense in retropharyngeal area extending to T4, the largest on right measuring 1x2 cm in dimension extending anterior to sternomastoid (Figure 2).

Incision drainage was performed under general anaesthesia. Patient was administered general anaesthesia with endotracheal intubation by an experienced anaes-
thetist, while keeping trolley for stab tracheostomy ready for any eventuality. The intubation was, however, successful. Incision was given along the anterior border of sternomastoid i.e. point of maximum bulge. Carotid sheath was identified and carefully retracted. As soon as the abscess cavity was opened, a pool of pus spurted out (Figure 3). About 150-200 cc of frank pus was sucked out.

Laboratory examination of pus confirmed presence of acid fast bacilli. Dysphagia and dyspnoea settled immediately after operation and Horner's syndrome spontaneously recovered. Patient was put on anti-tuberculosis treatment. It consisted of Tab. Rifampicin (600 mg OD), Tab. INH (300 mg OD), Tab. PZA (1750 mg OD), Tab. Myambutol ((1200 mg OD) and Tab. Vita 6 (50 mg OD). Treatment was continued for 2 months, after which PZA was withdrawn, Myambutol was reduced to 800 mg OD while rest of ATT was continued under the supervision of medical specialist with monthly follow-up. He was also reviewed by Orthopaedic Surgeon who advised fixation of cervical spine with hard cervical collar with the advice to undergo the spinal fixation procedure soon.

Periodic eye examination was carried out during this period to detect early signs of macular degeneration as a result of treatment with Myambutol. He is being followed-up by medical specialist and Otolaryngologist and till the last visit, he was doing well with treatment with no signs of recurrence of symptoms of retropharyngeal abscess or Horner's syndrome. The patient wore cervical collar without any neurological deficit till his last visit. He has, however, intended to undergo the spinal fixation procedure soon.

DISCUSSION

The retropharyngeal space (space of Gillette) lies behind the posterior pharyngeal wall and the prevertebral muscles covered by fascia. It contains the retropharyngeal lymph nodes at the level of cervical vertebra $C_2$ and $C_3$. This lymphoid tissue is, however, present in children only. Retropharyngeal space of two sides is separated by a midline fibrous raphe that receives the insertion of pharyngeal constrictors, anchoring them to the mid pre-vertebral region. Chronic retropharyngeal abscess is usually of tuberculous aetiology. It generally affects adult age group. It may be due to tuberculous process involving the retropharyngeal lymph nodes in which case it may be limited to one side of midline. This involvement may be primary or occur secondary to tuberculosis elsewhere in the body. Alternately chronic retropharyngeal abscess can also be secondary to caries spine where it is central in origin and may erode into retropharyngeal space on both sides of midline. Any other form of tuberculous infection in or around cervical spine like cranio-vertebral tuberculosis may also lead to retropharyngeal abscess. It should be suspected in a person who presents with a destructive lesion of the vertebra and a retropharyngeal mass. In a study conducted at Radiology Department of a French Hospital, out of 122 cases of Pott's disease (caries spine), 2 developed retropharyngeal abscess.

Main symptoms are due to obstruction of deglutition, respiration and speech. Chronic retropharyngeal abscess is very rarely described in children where it may present as obstructive sleep apnoea. The infective process from retropharyngeal space may occasionally extend to involve parapharyngeal space or downwards resulting in dreadful complication like mediastinitis.

As the abscess area is lying in close proximity to several important structures, the abscess can present in a variety of ways other than the presentations mentioned above. On rare occasions, it may present with palsies of nerves passing from or around retropharyngeal space e.g. the involvement of 12th cranial nerve reported in literature. The unique feature of our case was involvement of cervical sympathetic chain by the abscess, resulting in Horner's syndrome as one of the presenting features. It has been reported for the first time in Pakistan as a co-presentation of retropharyngeal abscess.

Lateral neck X-ray and CT scan are useful investigative tools to first suggest and then confirm the retropharyngeal abscess, extent and size. Lateral neck X-ray has sensitivity and specificity of 80% and 100% in picking-up retropharyngeal abscess while for CT scan it is 100% and 45% respectively. However, CT has limitation in differentiating abscess from cellulitis with accuracy of 73.5%, with false positive rate of 11.8% and false negative rate of 14.7%, and, therefore, the decision for surgical intervention/drainage must be guided by clinical findings as well as CT diagnosis.

Chronic abscess is drained from outside from the posterior or anterior border of sternomastoid. If drainage of abscess is planned from anterior border of sternomastoid muscle, carotid sheath must be identified.
and carefully retracted before incising the abscess cavity. A full anti-tuberculosis treatment is then given to arrest the tuberculous process.

Tuberculous retropharyngeal abscess must be kept in mind in tuberculous endemic zones like Pakistan, particularly when a neglected case of tuberculosis develops dyspnoea or dysphagia. To avoid missing a case, the Otolaryngologist in Pakistan must keep all rare presentations of this disease in mind including Horner's syndrome.

REFERENCES


