Mediastinal abscess and pericarditis complicating retropharyngeal abscess – A case report

*S. Elango, M.S., DLO.
**Rex Edward, F.R.C.S.
*G.N. Purohit, M.S.

*Lecturers in E.N.T.
**Lecturer in Surgery.

School of Medical Sciences
Hospital Universiti (USM)
16150 Kubang Kerian
Kelantan

Summary

A case of retropharyngeal abscess complicated by mediastinal abscess and pericarditis is reported and its management is outlined.

Key words: Retropharyngeal abscess, Complication, Pericardities, Mediastinal abscess.

Introduction

Retropharyngeal abscess has become rare in adults since the advent of antibiotics. Retropharyngeal abscess is seen more often in infants and young children. Although receiving little attention in recent literature, retropharyngeal abscess can cause, serious complications.[1,2,3] We report a case of retropharyngeal abscess following an upper respiratory infection which was complicated by mediastinal abscess and pericarditis.

Case report

A 40 year old Malay man was referred from a district hospital with complaint of pain in the throat and dysphagia of one week's duration. He also complained of swelling in the neck, dyspnoea and noisy breathing of two days' duration. These symptoms were preceded by an upper respiratory tract infection. On examination he was febrile, toxic and dyspnoeic. There was moderate inspiratory stridor. Examination of the oral cavity revealed a smooth bulging of the posterior pharyngeal wall on the left side. There was a tender diffuse swelling over the front of the neck which was not fluctuant. Ear and nose examination were normal. There were no palpable nodes in the neck. X-ray of the neck revealed marked widening of the prevertebral space and narrowing of the airway at the laryngeal inlet. A diagnosis of retropharyngeal abscess with cellulitis of the neck was made. A blood culture taken on admission was negative. Pus and sputum cultures for acid-fast bacilli were negative.

Under local anaesthesia, an intra-oral incision was made on the left side of the posterior pharyngeal wall and 50cc of foul-smelling pus was drained. The pus was sent for culture and antibiotic sensitivity but no organisms were isolated for either aerobic or anaerobic bacteria.

Following a temporary improvement in the general condition of the patient he developed orthopnoea on the fifth post operative day, when he also complained of left sided chest pain. On auscultation of the chest breath sounds were decreased on the left side. Coarse crackles were heard over the sternum with each heart beat. X-ray of the chest (Fig. 1) revealed mediastinal

widening, shifting of the mediastinum to the right side and opacity over the left lower zone. A lateral film (Fig. 2) showed a fluid level in the anterior mediastinum. An ECG (Fig. 3) showed generalised ST segment elevation compatible with pericarditis. Two dimensional and M. mode echocardiography showed a moderate sized pericardial effusion.

A diagnosis of mediastinal abscess with pericarditis was made. Drainage of the mediastinum was done by a midline incision just below the xiphisternum. About 200cc of pus was drained from the anterior mediastinum. A thoracic tube was inserted into the anterior mediastinum. Post operatively the daily drainage amounted to 100–200cc for the first seven days but this gradually decreased in amount over the next few days. A repeat chest x-ray showed a clear anterior mediastinum. Repeat ECG showed complete resolution of the previously noted S–T segment changes.

When the patients condition stabilised he was discharged and advised to come for follow up which he failed to comply.

Discussion

The retropharyngeal space extends from the base of the skull superiorly to the superior mediastinum inferiorly. Spread of infection from the retropharyngeal space into the mediastinum can occur by direct spread into the posterior mediastinum; or owing to its anterior connection with the pretracheal space, infections can spread into the anterior mediastinum.

The commonest cause of retropharyngeal abscess in adults is tuberculosis of spine. Other causes of retropharyngeal abscess are a penetrating foreign body, an upper respiratory tract infection

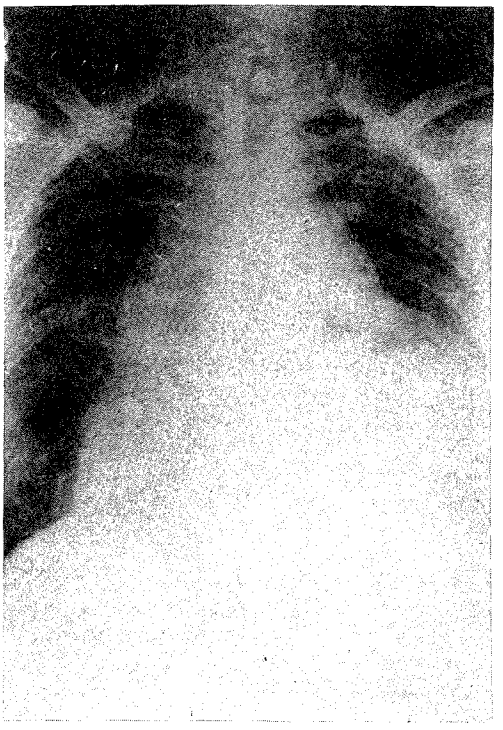

Fig. 1 AP view – showing mediastinal widening.

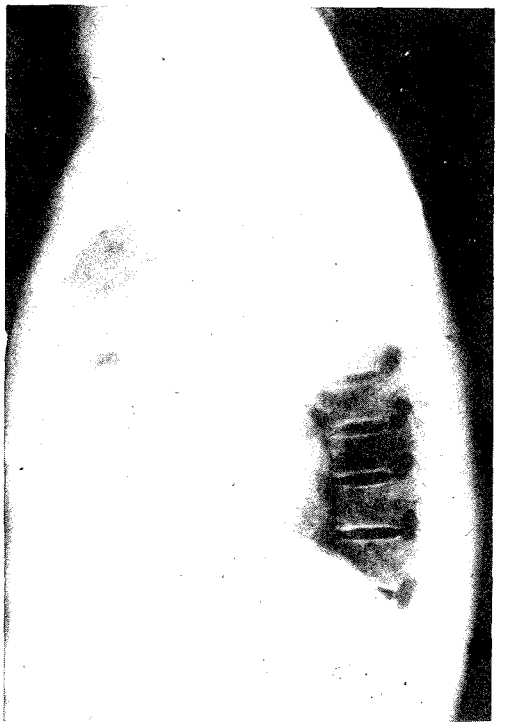

Fig. 2 Lateral view showing fluid level in the anterior mediastinum.

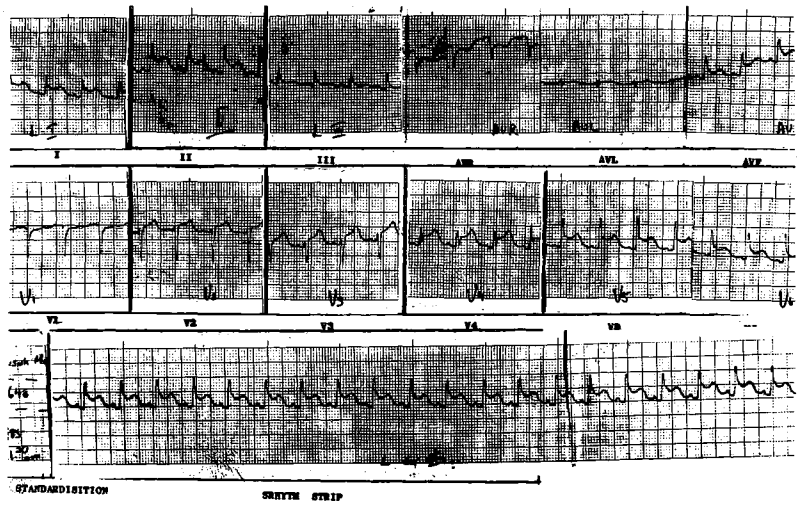

Fig. 3 Retropharyngeal abscess with mediastinitis ECG.

and as a complication of endoscopy. In our patient the retropharyngeal abscess followed an upper respiratory infection. Unfortunately the causative organism could not be isolated because the patient was already on antibiotics when he was referred to us.

Earlier reports of mediastinal abscess complicating retropharyngeal abscess,[1] show that in one of the reports, the diagnosis of mediastinal abscess was made during autopsy[2] and in the other, though diagnosed earlier, the patient died during surgery.[3]

In our present case there is a combination of retropharyngeal abscess, mediastinal abscess and pericarditis which is rare. The mediastinal abscess was successfully drained and the patient improved because of the timely drainage of the mediastinum.

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Address for Correspondence
Dr. S. Elango
School of Medical Sciences
Universiti Sains Malaysia
11800 Minden, Penang.

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