Ligation of the hernial sac in inguinal hernia surgery is not only unnecessary and time consuming but also leads to increased post-op pain. Recurrence rates are unaffected by not ligating the sac. However, it is important to dissect the sac right up to the neck after which it may be either excised or inverted.

References

1. Lichtenstein H, Shulman AG, Amid PK. The tension free hernioplasty. Am J Surg 1989;157:188-93.
2. Rutkow IM, Robbin AW. Open Mesh Plug Hernioplasty. Prob Gen Surg 1995;12:121-7.
3. Abrahamson J. Etiology and pathophysiology of primary and recurrent groin hernia formation. Surg Clin North Am 1998;78(6):953-70.
4. Gilbert AI, Graham MF. Improved sutureless technique : Advice to experts. Prob Gen Surg 1995;12:117-9.
5. Crawford DL, Phillips EH. Laparoscopic repair and groin hernia surgery. Surg Clin North Am 1998;78(6):1047-62.
6. Gilbert AI. An anatomical and functional classification for the diagnosis and treatment of inguinal hernia. Am J Surg 1989;157:331-6.

Radiological Quiz

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A 58 year old female presented with progressive difficulty in breathing for the past few months. On examination she was found to have mild stridor. A plain

X-ray chest and contrast enhanced CT of the chest are shown. Can you spot the diagnosis.

Fig. 1 : Plain X-ray chest

Fig. 2 : Contrast enhanced CT chest

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Answer to Radiological Quiz

Bronchogenic Cyst

The chest radiograph shows a right paratracheal well defined and homogenous mass. The contrast enhanced CT reveals a uniform density (45 HU) middle and posterior mediastinal mass with a thin imperceptible capsule. The lesion is compressing the trachea (arrow) and this accounts for the patients symptoms. Cystic masses comprise 15%-20% of all mediastinal masses [1]. Of these bronchogenic cysts are the commonest and result from abnormal or late budding of ventral lung bud or tracheobronchial tree. On histology they reveal respiratory or enteric epithelium, seromucinous glands and also cartilage plates, which are the most distinguishing feature of these cysts [3].

Bronchogenic cysts are usually detected incidentally and may reach a large size to compromise the major airways and thereby cause symptoms. Rarely, infected cysts or haemorrhage in a cyst can be a life threatening emergency especially in children [2]. On a plain film of the chest, a spherical or oval mass with smooth margins and a homogenous density are the most important signs as to the presence of a cyst. The commonest location is around the carina, while some occur in the paratracheal or retrocardiac area. The majority lie in the middle and / or posterior mediastinum frequently displacing the trachea and oesophagus. These cysts, rarely communicate with the bronchial tree and when they do so the cyst may drain out leaving a collapsed cystic structure. Calcification of the cyst walls is extremely rare [1-4]. On CT, these lesions are well defined, unilocular with smooth thin walls and a clear demarcation between the surrounding mediastinal organs. The density of the contents varies between 0-100 HU depending upon whether this is a clear fluid or

thick mucoid material [1-4]. MRI on Spin Echo shows bronchogenic cysts as high signal intensity on both T1 and T2 weighted images [1,2,4]. Esophageal duplication cysts are identical in appearances except these cysts are tubular, have thicker walls and are in intimate contact with the esophagus [1,24]. Neurenteric cysts frequently produce symptoms like pain, lie more posteriorly and are usually but not invariably accompanied by congenital defects in the spine [1,2,4]. Pericardial cysts - majority are in the right cardiophrenic angle while a minority may be on the left side. On axial imaging these cysts are seen to be attached to the pericardium [1,2,4]. Mesenteric pancreatic pseudocysts are always located in the posterior mediastinum and are connected to the pancreatic lesions through the aortic or esophageal diaphragmatic hiatus. In adults, there are concomitant features of pancreatitis, whereas in children a history of abdominal trauma as the etiology has to be elicited [1,2]. Occasionally, an enlarged left atrium on an X-ray PA view of the chest may mimic a subcarinal bronchogenic cyst [2].

References

1. Gamsu G. The Mediastinum. In : Moss AA, Gamsu G, Genant HK, editors. Computed Tomography of the whole body (with magnetic resonance imaging). 2nd ed. Philadelphia WB Saunders Co. 1992;85-7.
2. Armstrong P. Mediastinal masses. In : Grainger RG, Allison DJ, editors. Diagnostic Radiology - A textbook of medical imaging 3rd ed. New York Churchill Livingstone 1997;290-1.
3. Reed JC. Chest Radiology-Plain Film Patterns and Differential Diagnosis. 3rd ed. St Louis Mosby Year Book 1991;118-9.
4. Tarver RD, Conces DJ, Jr. Mediastinal Disease. In : Haaga JR, Lanzieri CF, Sartorius DJ, Zerhouni EA, editors. Computed Tomography and Magnetic Resonance Imaging of the whole body, 3rd ed. Singapore Harcourt Brace and Co Asia Pvt Ltd. 1994;756-7.