Scabbard Trachea in a Case of Retrosternal Goitre

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Abstract Scabbard is the sheath used for covering swords, knives or other large blades. A scabbard trachea is called so because of its resemblance of shape (Fig. 1) caused by lateral compression usually by thyroid enlargement. Here we present such a case depicting the radiological findings of a scabbard trachea.

Keywords Scabbard trachea · Scabbard · Retrosternal goitre · Pemberton sign

Case Study

A 45-year-old lady presented with a slowly growing mass in the neck for the last 15 years and progressive dyspnoea and dysphagia for the last 3 months. There was no history suggestive of recurrent laryngeal nerve involvement, toxicity or features of malignant spread. Examination revealed grade II diffuse goitre with left lobe predominance. The lump was firm

and lower border could not be palpated even on deglutition along with dull note over manubrium on percussion. Pemberton's sign was positive as evident by facial redness and respiratory distress within 15 s of straight hand raising above the head. Left internal carotid artery pulsation was shifted behind the left sternocleidomastoid muscle. No lymph nodes were palpable. The straight chest X-ray and CT scan of the head and neck revealed a grade I retrosternal goitre [1] with a scabbard trachea and a gross shifting to the right due to the lump (Figs. 1, 2). Surgery was advised for her.

Terms such as retrosternal, substernal, intrathoracic or mediastinal goitre have been used to describe a goitre that extends beyond the thoracic inlet, or has more than 50% of its volume below this level [1, 2]. Retrosternal goitres have a reported incidence of 6–11% of all patients undergoing thyroidectomy [3–5], and four times higher incidence in females, mostly in their 4th to 5th decade [4–6]. The most common symptoms are related to compressions of airway and oesophagus [5, 7].

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Fig. 1 Straight X-ray of the neck of the patient showing resemblance of the trachea with a scabbard

Fig. 2 CT scan of the neck of the patient showing laterally compressed trachea with shift to the right due to goitre

Compliance with Ethical Standards

Conflict of Interest The authors declare that they have no conflict of interest.

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