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IMAGING IN INTENSIVE CARE MEDICINE

Ultrasonographic diagnosis of tracheal compression

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A 3-year-old child with a history of surgery for esophageal atresia suffered an episode of sudden respiratory distress, severe cyanosis and loss of consciousness at home while eating potatoes. He was resuscitated by the emergency medical service and transported to our hospital, where he was intubated, stabilized and transferred to our intensive care unit. The chest X-ray was unremarkable, while a right upper lobe atelectasis was visible on pulmonary ultrasonography (US). Bronchoscopy revealed a compression of the lower two-thirds of a seemingly malacic trachea, extending to the carina and the right main bronchus. No foreign body was visible.

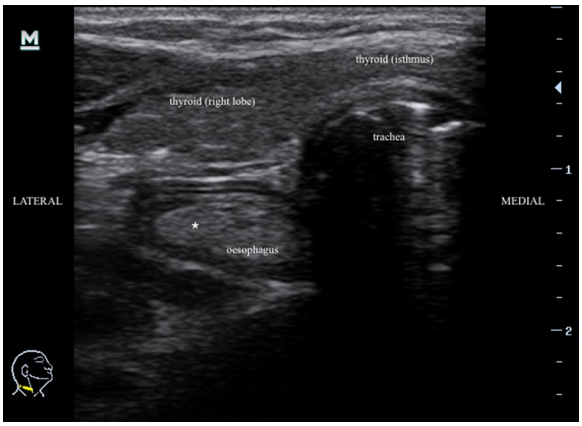

Fig. 1 The image is an axial scan of the neck performed just above the right clavicle with a linear 10 MHz probe. The probe was oriented with its marker towards the patient's right side. The most superficial structure in the image is the thyroid, with its right lobe and isthmus. Immediately below the isthmus the trachea is visible with its artifacts due to tissue-air interface. Below the right isthmus and just to the right of the trachea, the esophagus appears as a hypoechoic ring containing a mass with a uniform structure, similar in echogenicity to the thyroid

A bedside neck US was then performed, and a large food bolus with a uniform structure (asterisk, Fig. 1) was found in the esophagus at the thoracic inlet, lateral to the trachea, medial to the carotid artery (not shown), underneath the right thyroid lobe. This position is unusual in that the esophagus is normally seen on the left side of the trachea.

The food bolus (potato) was removed by esophagogastroduodenoscopy and the esophagus cleared. The patient had a complete recovery and was discharged on day 2.

Compliance with ethical standards

Conflicts of interest
On behalf of all authors, the corresponding author declares that there is no conflict of interest.

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