H-type tracheo-oesophageal fistula in a 7-year-old girl

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DESCRIPTION

A 7-year-old girl was referred from a local hospital with a history of recurrent chest infections, chronic cough since birth and occasional wheeze. A key symptom reported by parents was the frequent passing of flatus. Her cough persisted during sleep, worsened with eating and drinking, and parents described a 'foggy voice' after ingestion. Thickened fluids introduced at age 5 improved her symptoms somewhat.

Initial investigations, including video fluoroscopy, sweat test, functional antibodies and immunoglobulins, were normal. Previous X-ray of the chest showed signs of persistent lower zone consolidation. Contrast CT of the chest showed evidence of an H-type tracheo-oesophageal fistula (figure 1). This was confirmed on bronchoscopy/upper Gastrointestinal endoscopy. Symptoms resolved following successful surgical repair.

H-type fistulas remain a rare occurrence, and their diagnosis beyond the neonatal period even more so.[1]

A literature search reveals a handful of case reports over the age of 2 years at diagnosis.[2–4] Presenting findings in the majority consisted of the typical features of recurrent chest infections, vomiting and coughing/choking episodes during feeding.

This case highlights that H-type fistulas remain an important, but rare, differential diagnosis for older children with chronic wet cough and recurrent chest infections. They are often found in isolation with no other congenital abnormalities,[5] in contrast to those with an oesophageal atresia.

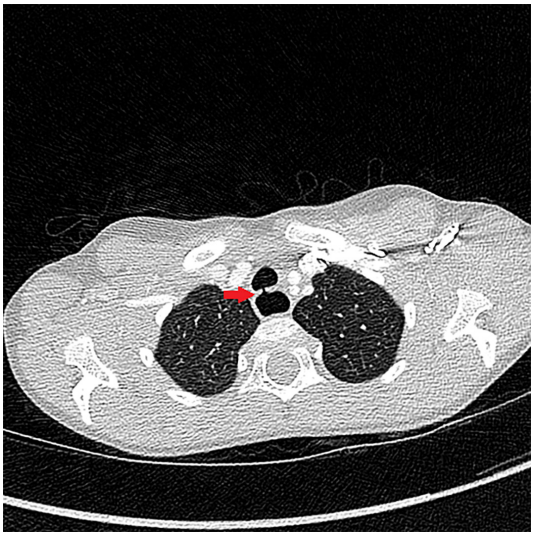

Figure 1 CT of the thorax axial slice showing tracheo-oesophageal fistula (red arrow).

Learning points

- Consider the diagnosis in children with recurrent respiratory illnesses, cough associated with feeding and negative investigations thus far.
- H-type fistulas although very rare are cured with surgical repair.
- They are often found in isolation with no other congenital abnormalities, unlike those with oesophageal atresia.

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