

Esophageal Stenosis Due to Coexisting Conditions Dysphagia Aortica and Thoracic Compression Fractures

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1. Clinical Images

A 90-year-old woman presented to the emergency room with dyspnea and a sensation of being choked after eating red rice with beans. This was her first such experience. She was capable of vocalization. Physical examination showed a Glasgow Coma Scale score of E4 V5 M6, respiratory rate 24 breaths/min, and oxygen saturation (SpO₂) first half of 90% (room air). Her SpO₂ was normally 96% during previous routine visits to the hospital. Her respiratory status did not deteriorate. Chest radiography showed no significant findings, axial CT revealed esophageal compression due to tortuous aorta and fractured thoracic vertebrae (Figure 1), coronal CT showed foreign body accumulation from the upper to lower thoracic esophagus (Figure 2), while sagittal CT showed esophageal stenosis at the levels of tortuous aorta and thoracic compression fracture (Th10 and 11) (Figure 3). A nasogastric (NG) tube was inserted to drain food residue from the esophagus. After suctioning the esophagus, SpO₂ immediately ascended to 96%. Her symptoms disappeared soon after the procedure and did not recur.

Dysphagia aortica is more common in females and is associated with advancing age and hypertension [1]. Our patient was taking antihypertensive medication.

Prompt radiographic evaluation is key for diagnosis of dysphagia aortica and recovery. Multi-planar reconstruction CT is the most optimal imaging system. Axial, coronal, and sagittal CT will identify the maximum diameter of the esophagus, the storage range and the degree of stenosis, respectively.

Decompression is the first priority for patients with esophageal foreign body, and the use of a NG tube makes this procedure simple, rapid, inexpensive and effective. Use of the NG tube has been successful in up to 88% of cases with a low rate of complications [2].



Figure 1: Axial CT demonstrating esophageal compression owing to tortuous aorta and fractured thoracic vertebrae.



Figure 2: Coronal CT showing foreign body accumulation from upper to lower thoracic esophagus with tortuous aorta.



Figure 3: Sagittal CT demonstrating esophageal stenosis at the levels of tortuous aorta and thoracic compression fracture (Th10 and 11).

2. Conflicts of Interest

The authors have stated explicitly that there are no conflicts of interest in connection with this article.

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