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IMAGES IN CLINICAL PRACTICE

DYSPHAGIA IN AN ADOLESCENT GIRL

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ARTICLE HISTORY
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A 17-year-old girl with a history of autoimmune hemolytic anemia (AIHA) presented with acute chest pain and dysphagia. There was no giddiness, syncope or effort intolerance. On examination, she was pale, mildly jaundiced and had splenomegaly. Investigations revealed anemia with reticulocytosis, unconjugated hyperbilirubinemia and positive direct Coomb's test consistent with a relapse of AIHA. Cardiac enzymes, chest X-Ray, and electrocardiogram were normal. She was started on prednisolone and her anemia improved. A barium swallow was performed when her symptoms persisted, which revealed posterior indentation of the proximal esophagus at the level of T3-4 (Figure 1A). Computed tomographic (CT) thorax is depicted in Figure 1B and 1C. Esophagogastroduodenoscopy showed mild gastritis but confirmed the area of extrinsic compression with proximal dilatation of the esophagus.

Figure 1: Arrows indicate posterior indentation of the proximal esophagus seen on barium swallow fluoroscopy (A) and CT thorax (B and C).

What is the diagnosis?

Discussion

CT thorax showed an aberrant right subclavian artery (ARSA) originating as the last branch of the aortic arch, coursing posteriorly indenting the posterior esophagus, consistent with dysphagia lusoria. The patient was referred to cardiothoracic service but as her symptoms were mild, she was treated conservatively with proton pump inhibitors and lifestyle modification.

Dysphagia lusoria describes swallowing difficulties secondary to esophageal compression by an ARSA. ARSA is the most common anomaly of the aortic arch with an incidence ranging from 0.5% to 1.8%. (1-3) While majority remain asymptomatic, symptoms may affect the very young and adults if compression is significant. Children typically present with respiratory symptoms while adult patients present with dysphagia and chest pain. Infrequently, dysphagia has been reported in pediatric patients. (4,5). A barium swallow is suggestive but CT or MRI angiography are best for diagnosis. (3) Surgical management is reserved for severe cases.

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JX Siew prepared the manuscript. ZX Khoo reviewed and edited the manuscript and is the primary physician of the patient.

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Compliance with Ethical Standards

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