

Aberrant Right Subclavian Artery



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Patient X

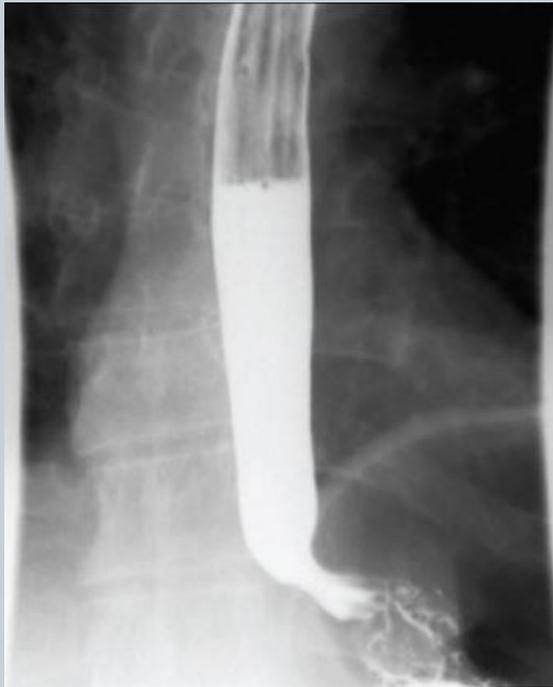


- 63 yr old female c/o dysphagia, throat pain
- Intermittent, lasts up to 6hr
- Self-restrictive diet to pureed food and broths due to pain
- Mild weight loss

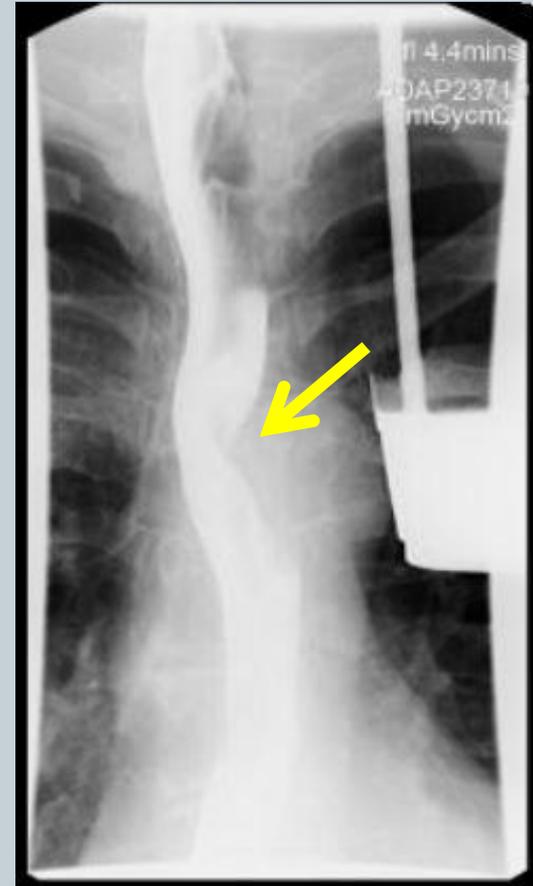
- **PMH:**
 - GERD
 - CAD
 - Abberant right subclavian artery

- **PSH:**
 - Nissen fundoplication 9/2011
 - Axillo-axillo bypass and division of ARSA 5/14
 - Carotid-subclavian bypass 9/2016

Esophagram



<https://www.dick.com/blog/2017/esophagrams-your-questions-answered>

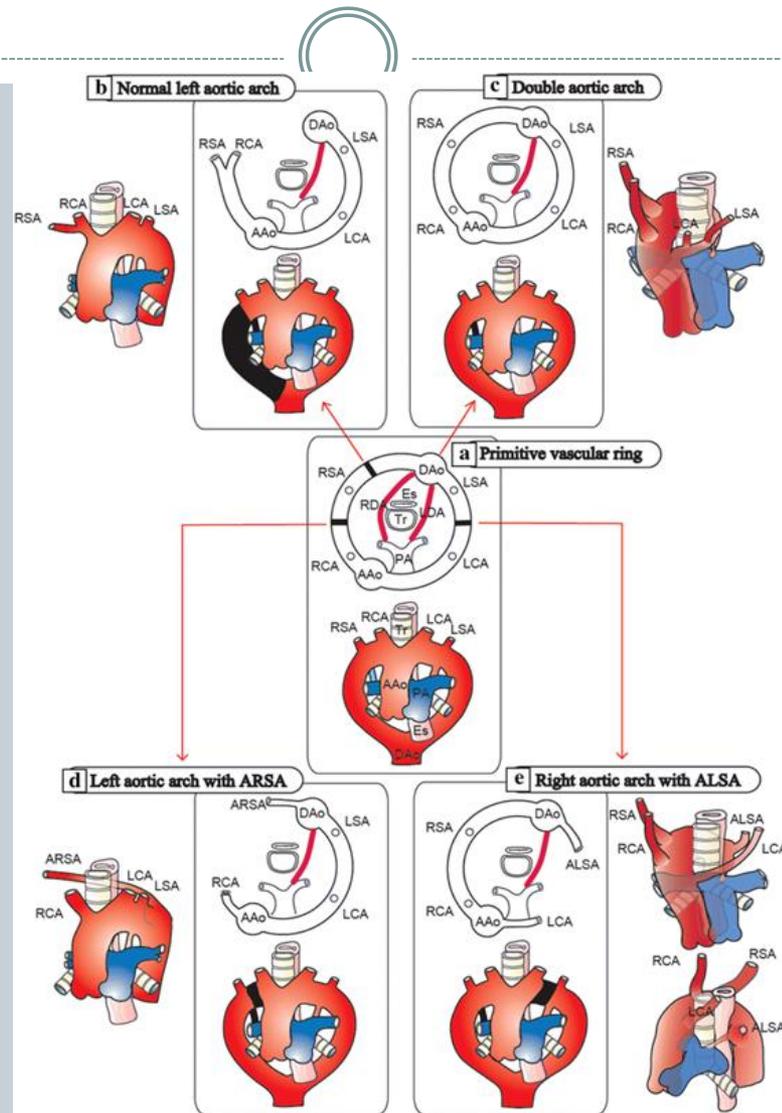


Background



- Aberrant Right Subclavian Artery (ARSA) is the most common congenital vascular anomaly of the aortic arch
- Prevalence: 0.4-1.8%
 - 3:1 female predominance
- Regression of the right 4th aortic arch between carotid and subclavian arteries
- Right subclavian persists as a branch of descending aorta, not innominate artery
 - aortic arch is on the left
 - associated with Kommerell's diverticulum, vascular ring

Development



Patient X CTA



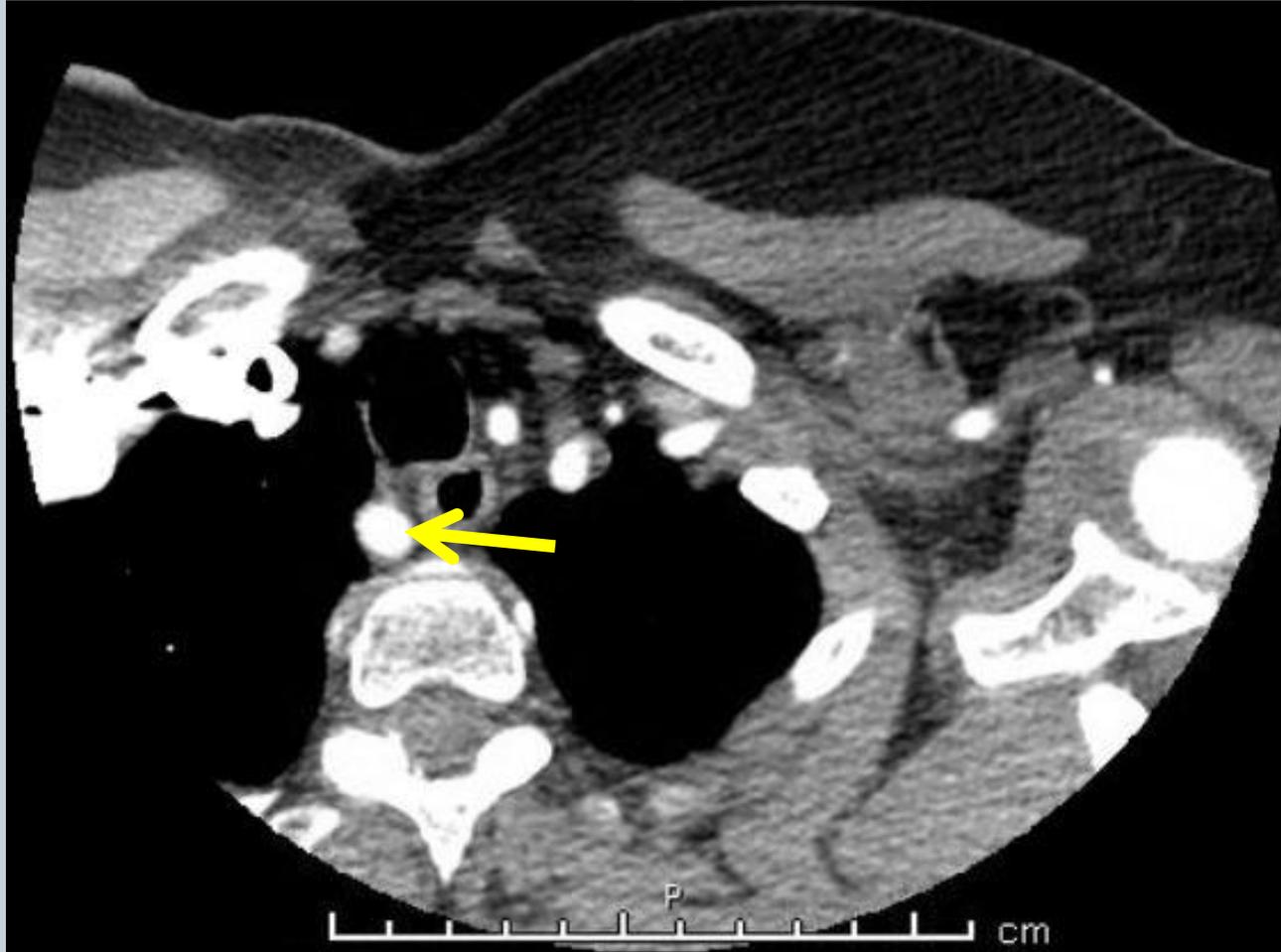
Course of ARSA in Patient X



- Retroesophageal (80%)
- Between trachea and esophagus (15%)
- Anterotracheal (5%)



Retrosesophageal ARSA in Patient X



Symptoms



- Usually asymptomatic (90-95%)
- Dysphagia
- Chest pain
- Cough
- Stridor
- Rarely dyspnea

Diagnosis and Treatment



- **CT or MRI gold standard**
 - Kommerell's diverticulum- risk of rupture
 - Vascular ring
 - Relationship to adjacent structures esp. pre-op for thoracic surgeries
- **Surgical treatment:**
 - Division of R subclavian artery and translocating it to the right common carotid artery or the proximal aortic arch
 - Carotid-subclavian by-pass graft
 - Axillo-axillo bypass graft
 - Reconstruction of subclavian artery
- **Goals of intervention:**
 - Prevent life-threatening hemorrhage
 - Symptom reduction

References



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Questions?

