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.dic-kc.com/blog/2017/esophagrams-your-questions-answered
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 4\(^{th}\) 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%)
Retroesophageal 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

Questions?