56M Incidental finding

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Right Aortic Arch with Aberrant Left Subclavian Artery (ALSA)
Impression on right side of trachea

Trachea deviated to left
Imaging Findings

• Radiograph: Right paratracheal rounded opacity with leftward tracheal deviation

• CT:
  – Aortic arch courses to right of trachea
  – RAA with ALSA: Left carotid, right carotid, right subclavian, followed by retroesophageal ALSA
Right Aortic Arch Types

- Uncommon (~ 0.05 - 0.1% of population)
- RAA with aberrant left subclavian artery (ALSA)
- RAA with mirror image branching
- RAA with isolation of left subclavian artery
- RAA with left descending aorta
- RAA with aberrant brachiocephalic
1. RAA with aberrant left subclavian artery (ALSA)
   - Left carotid, right carotid, right subclavian, aberrant left subclavian arteries
   - ALSA has retroesophageal course
   - ± diverticulum of Kommerell at origin of ALSA
   - Most common type
   - Presentation: Rarely produces symptoms, usually incidental
     • can rarely cause esophageal and/or tracheal compression
   - Rarely associated w/ cardiovascular abnormalities
2. Mirror Image Branching
- Left innominate artery, right carotid, right subclavian arteries
- 2\textsuperscript{nd} most common type
- Presentation: usually as neonate/childhood

98% have congenital heart disease:

* tetralogy of Fallot
* truncus arteriosus
* tricuspid atresia
* transposition of the great vessels
* ASD/VSD
Treatment for RAA

• None unless symptomatic
• Surgery for relief of dysphagia or stridor
• Surgery for aneurysmal dilatation of diverticulum of Kommerell
References

1. Statdx
2. Radiopaedia