History
17 month old male with difficulty breathing.

Diagnosis
Circumflex Retroesophageal Right Aortic Arch

Discussion
Right aortic arch has been classified into various types: 1) Right aortic arch with aberrant left subclavian artery is the most common and is not associated with congenital heart disease. The order of brachioccephalic artery origin is the left common carotid artery followed by the right carotid, right subclavian, and left subclavian arteries. The right arch passes between the superior vena cava and right side of the trachea and esophagus, crossing over the right main-stem bronchus to join the descending aorta. 2) The right arch maintains a position to the right of the esophagus and descends on the right side of the spine. 3) The right arch passes behind the esophagus to turn abruptly downward, descending usually on the right side or near the midline. 4) Infrequently, the right arch crosses the midline behind the esophagus to descend on the left side of the spine, resulting in the circumflex retroesophageal right aortic arch. The impression upon the posterior esophagus on barium examination is more pronounced than that encountered with an aberrent subclavian artery.

Findings
CT- Axial image shows right aortic arch extending to the left behind the esophagus. Also note the subcutaneous hemangioma anterior to the sternum and nodular infiltrate in the right upper lobe. Volume rendered image shows the circumflex right aortic arch and tracheal stenosis.

Reference
Shuford WH, Sybers RG, Gordon IJ et al. Circumflex Retroesophageal Right Aortic Arch Simulating Mediastinal Tumor or Dissecting Aneurysm. AJR (1986); 146:491-496.
Disclaimer
This teaching site is partially funded by an educational grant from GE Healthcare and Advanced Radiology Services, PC. The material on this site is independently controlled by Advanced Radiology Services, PC, and GE Healthcare and Spectrum Health have no influence over the content of this site.

Content Download Agreement
The cases and images on this website are owned by Spectrum Health. Permission is granted (for nonprofit educational purposes) to download and print materials to distribute for the purpose of facilitating the education of health professionals. The authors retain all rights to the material and users are requested to acknowledge the source of the material.

Site Disclaimer
This site is developed to reach healthcare professionals and medical students. Nothing this site should be considered medical advice. Only your own doctor can help you make decisions about your medical care. If you have a specific medical question or are seeking medical care, please contact your physician.

The information in this website is provided for general medical education purposes only and is not meant to substitute for the independent medical judgment of a physician relative to diagnostic and treatment options of a specific medical condition.

The viewpoints expressed in these cases are those of the authors. They do not represent an endorsement. In no event will Advanced Radiology Associates, PC, Spectrum Health Hospitals (Helen Devos Children's Hospital) or GE Healthcare be liable for any decision made or action taken in reliance upon the information provided through this website.