

CLINICAL VIGNETTE

A rare case of right corkscrew cervical aortic arch associated with retrotracheal aberrant left brachiocephalic vein

Taner Kasar¹, Hasan Candas Kafali¹, Aysel Turkvatan², Yakup Ergul¹

¹Department of Paediatric Cardiology, Sağlık Bilimleri University Istanbul Mehmet Akif Ersoy Thoracic and Cardiovascular Surgery Research and Training Hospital, Istanbul, Turkey

²Department of Radiology, Sağlık Bilimleri University Istanbul Mehmet Akif Ersoy Thoracic and Cardiovascular Surgery Research and Training Hospital, Istanbul, Turkey

A nine-year-old female patient with syncope and wide QRS tachycardia was admitted to our hospital. Echocardiography revealed a tortuous right aortic arch. Electrophysiological study showed no abnormalities, and no tachycardia was induced. Left ventriculography yielded a so-called right corkscrew cervical aortic arch with no significant coarctation (Fig. 1). Three-dimensional computed tomography scans showed the right corkscrew cervical aortic arch with a retrotracheal course of the left innominate vein draining into the azygos vein, an aberrant left subclavian artery, proximal stenosis of the aortic arch, and tortuosity in the distal part of the right main carotid artery (Fig. 2A–C). β -Blocker therapy (metoprolol) was initiated due to clinical presentation of syncope with a documented wide QRS tachycardia and left bundle branch block. Genetic testing for arterial tortuosity syndrome and connective tissue disorders was scheduled. To our knowledge, this is the first report of a retrotracheal left brachiocephalic vein draining into the azygos vein and an aberrant left subclavian artery with a right corkscrew cervical aortic arch.

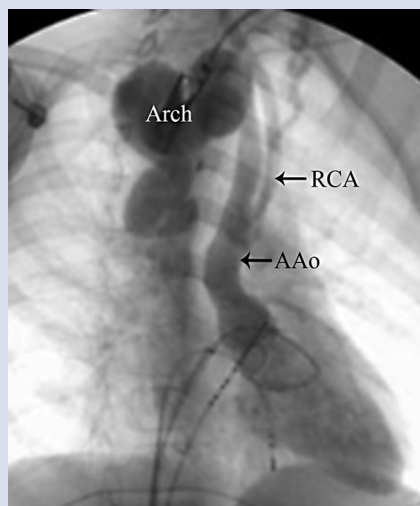


Figure 1. Aortic angiogram showing a right corkscrew cervical aortic arch (Arch); AAo — ascending aorta; RCA — right common carotid artery

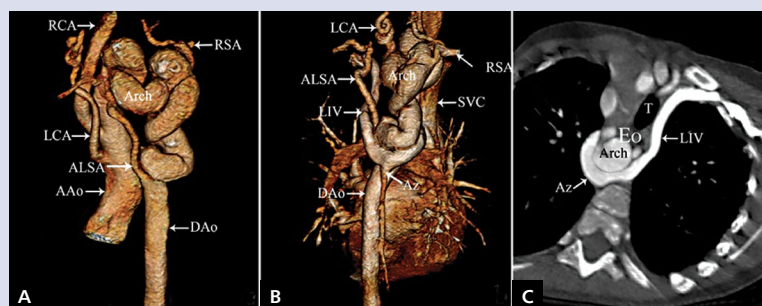


Figure 2. Three-dimensional (A, B) computed tomography images showing a right corkscrew cervical aortic arch and an axial (C) computed tomography image showing retrotracheal aberrant left brachiocephalic vein; ALSA — aberrant left subclavian artery; Az — azygos vein; DAo — descending aorta; Eo — oesophagus; LCA — left common carotid artery; LIV — left innominate vein; RSA — right subclavian artery; SVC — superior vena cava; T — trachea; other abbreviations — see Figure 1

Address for correspondence:

Taner Kasar, MD, Paediatric Cardiologist, Sağlık Bilimleri University Istanbul Mehmet Akif Ersoy Thoracic and Cardiovascular Surgery Research and Training Hospital, Paediatric Cardiology, İstasyon Mah. Turgut Özal Bulvarı No:11 Küçükçekmece, Istanbul, Halkali, Istanbul, Turkey, tel: +90 212 692 20 00, GSM: +90 505 886 08 10, fax: +90 212 471 94 94, e-mail: taner.kasar@hotmail.com

Conflict of interest: none declared

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