

Situs Inversus Totalis Associated with Anomalous Coronary Origin

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This is the case of a 57-year-old man with a history of progressive symptomatic dyspnea and angina. The chest X-ray showed dextrocardia as part of situs inversus totalis syndrome (Figure 1). The echocardiography revealed severe aortic regurgitation, while the coronary angiogram detected an anomalous right coronary artery originating in the “left” sinus of Valsalva (located to the right of the patient) from an ostium separated from the left coronary artery and with interatrial trajectory between the pulmonary artery and the aorta (Figure 2).

Situs inversus totalis is a rare syndrome of unknown origin, with an estimated prevalence of 1/10000 births, characterized by the abnormal rotation of the cardiac tube during embryogenesis. (1) In 95% of the cases it occurs in a structurally and functionally normal heart and the most common related anomalies are atrial septal defect, tetralogy of Fallot and pulmonary atresia. (2) The association with the anomalous origin of coronary arteries is extremely rare and there is only one publication by Webster et al reporting a case of single coronary artery associated with situs inversus totalis. (3)

Our patient underwent aortic valve replacement with a mechanical prosthesis and reimplantation of the anomalous coronary artery.

Conflicts of interest

None declared

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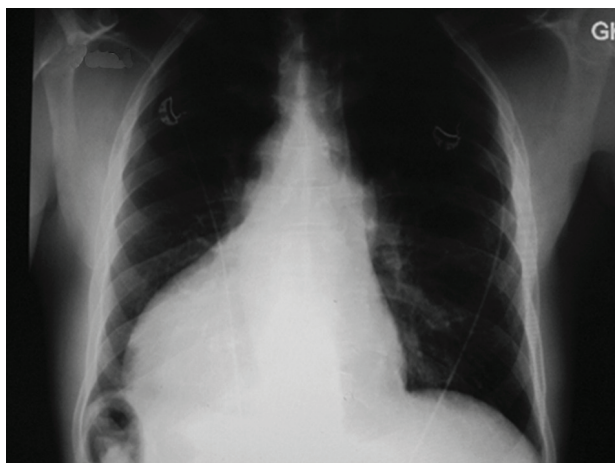


Fig. 1. Chest X ray with dextrocardia

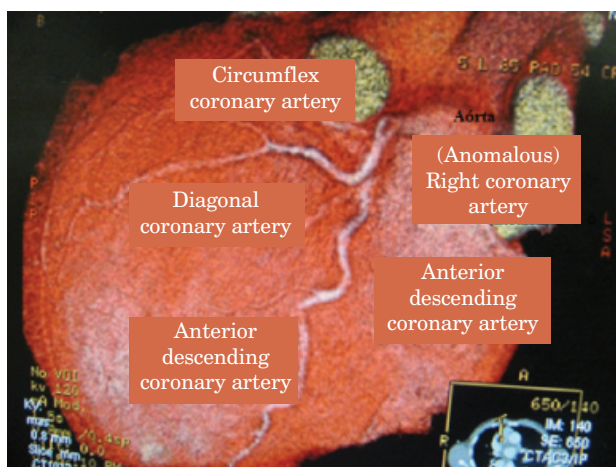


Fig. 2. Coronary angiogram with anomalous right coronary artery