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Images in Cardiology



## Prenatal diagnosis of aberrant left subclavian artery

Diagnóstico prenatal de subclavia izquierda aberrante

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## Este artículo también está disponible en español

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A fetal echocardiographic study of a 23-week pregnant woman is reported. When making the cross-sectional cuts of three extended vessels and aortic arch (AoA), the presence of two arches was suspected, a right arch of larger caliber and a smaller left arch; both originated in the last portion of the ascending aorta, with a backward direction, and passing through their respective bronchi, ending in the descending aorta (Figure 1). The echocardiography also showed the unilateral presence of the *ductus* (left). At birth, a multislice tomographic study was performed with a Siemens 64-channel machine (Figure 2). It demonstrated the presence of a right aortic arch with an aberrant left subclavian artery. The arch which was thought to be a left arch during fetal life was in fact the left brachiocephalic trunk.

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**Figure 1.** Fetal echocardiography. **A**. A right aortic arch is noticed. **B**. Similar image with color Doppler superimposed to the two-dimensional image. **C**. Fine vessel to the left (arrow), which was thought to be a left aortic arch and was in fact the left brachiocephalic trunk. **D**. Color Doppler identifies in blue (away from the transducer) the above mentioned vessel. Leyend (by its acronyms in Spanish). AP: pulmonary artery, AAD: right aortic arch.

The AoA defects may be related to complex heart defects or be classified as normal variants, which are rarely associated with clinical signs after birth. Two of these anomalies are the double AoA and the right AoA with left *ductus* and aberrant left subclavian artery, also regarded as a form of vascular ring, where the trachea and esophagus are surrounded in a circle.



**Figure 2.** Multislice tomographic study. In all views, the arrow points to the aberrant left subclavian artery emerging from the Kommerell diverticulum (\*).