Prenatal Diagnosis of Ascending Aorta Aneurysm

A pregnant 39-year-old woman was referred to us after dilatation of ascending aorta had been detected in the ultrasound performed at 27 weeks of gestation. Fetal echocardiography revealed an ascending aorta aneurysm (AAasc) measuring 15×10 mm in diameter (Figure 1). The aortic arch and descending aorta (Adesc) were of normal size (Figure 2). The structure and kinetics of the aortic valve (Vao) were normal, with no obstruction. No other associated anomaly, either cardiac or extracardiac, was observed, and the fetus showed no signs of heart failure. There was no family history of Marfan syndrome or other connective tissue diseases. A second examination was carried out at 30 weeks of gestation, but no changes in the size of the aneurysm were detected. Delivery was vaginal with no complications, and postnatal follow-up echocardiography demonstrated that the size of the aneurysm remained similar (Figure 3).

At the age of 3 months, the patient is asymptomatic and the size of the aneurysm has not changed. The majority of ascending aorta aneurysms reported in the literature to date are diagnosed during childhood or adolescence and are associated with connective tissue diseases such as Marfan syndrome or Ehlers-Danlos syndrome, or with cardiac or extracardiac malformations. Very few aneurysms that are not associated with these anomalies, as occurs in the case we present, are diagnosed during the prenatal period. Thus, the subsequent course remains uncertain.

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