Giant cardiac aneurysm: an anomaly with difficult prenatal counselling

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Introduction
The cardiac aneurysm is an anomaly that constitutes 0.04% of all congenital heart diseases. Atrial location is very rare. The natural history of this pathology can be complicated by death, heart failure, arrhythmias and thrombosis.

Case report
A 28-year-old primigravida was referred to our tertiary fetal medicine unit at 19 weeks of gestation with the suspected diagnosis of cardiac aneurysm.

12 x 10 mm
Broad base
Hypokinetic and paradoxical movement

Sacular dilation of the free wall of the right atrium

Cardiac valves functioned correctly
No other cardiac anomalies were associated

Differential diagnosis
- Pathologies with tricuspid valve involvement
- Diverticulum
- Cardiac pseudoaneurysm
- Pulmonary atresia with intact ventricular septum

The parents were counseled of the poor prognosis
They decided to continue with the pregnancy

Follow up
Serial echocardiograms demonstrated progressive enlargement of the aneurysm, reaching up 30 by 50 mm.

No cardiac overload was found.
There was no compression of other cardiac structures

At 14 months of age the infant is asymptomatic and the aneurysm has not increased its size

There are 32 cases of aneurysm of right atrium diagnosed prenatally, most with good intrauterine evolution. After birth, approximately one half are surgically repaired, either due to growth or symptoms of the child

Conclusion
Adequate and individualized prenatal counselling must be carried out. Although the general prognosis is poor, some factors could contribute to a better clinical result.

Figure 1. Ultrasound of giant cardiac aneurysm at 19+3 weeks

Cardiac valves functioned correctly
No other cardiac anomalies were associated

Figure 2. Ultrasound at 35 weeks of gestation

At 14 months of age the infant is asymptomatic and the aneurysm has not increased its size

Figure 3. MRI at 8 months of age