P20.03 Prenatal diagnosis of fetal primary cardiac fibroma: a case report

Fetal primary cardiac tumors (FPCT) are rare in all age groups with an incidence of 0.0017-0.027% at autopsy.

Fetal follow up is crucial since life threatening complications, including arrhythmia, hydrops fetalis, ventricular inflow/outflow obstructions, cardiac failure, and even sudden death may develop.

Case report
A 28 years old primigravida was referred at 34 weeks of gestation with diagnosis of pericardial tumor and effusion, for further workup.

Fetal echocardiogram revealed a slightly heterogeneous mass measuring 34x29x33mm (volume 17ml.) with poor vascularization, growing from the external aspect of the right ventricle causing slight ventricular wall dyskinesia, mild RA & RV compression and pericardial effusion. Fetal cardiac MRI showed a homogeneous non-cystic mass, with no noticeable differentiation from the ventricular wall in different sequences.

The cephalad upper limit reached the root of the great arteries without infiltration. At 38 weeks of gestation, a 3400 grams male was born through C-section. The postnatal confirmed a slight compression of the cavities without significant obstructive signs with moderate pericardial effusion and no signs of dysfunction or cardiac arrhythmia.

The infant remained stable with no further compromise of cardiac function, normal growth and development.

At 3 months of age a new cardiac MRI was performed, showing similar findings compared to the prenatal study and a slight increase of pericardial effusion.

At 4 months of life surgical excision was decided. A complete removal of tumor was precluded due to the close relationship of the mass with the right ventricular free wall, the presence of branches arising from the right coronary artery through the tumor and the absence of a cleavage surgical plane. Postsurgical outcome was uneventful.

Conclusion
Cardiac tumors are unusual findings in fetal echo. Knowledge about the location and imaging characteristics may help in the differential diagnosis and prognosis.

We present a case of fetal cardiac fibroma with exophytic growth from atroventricular sulcus