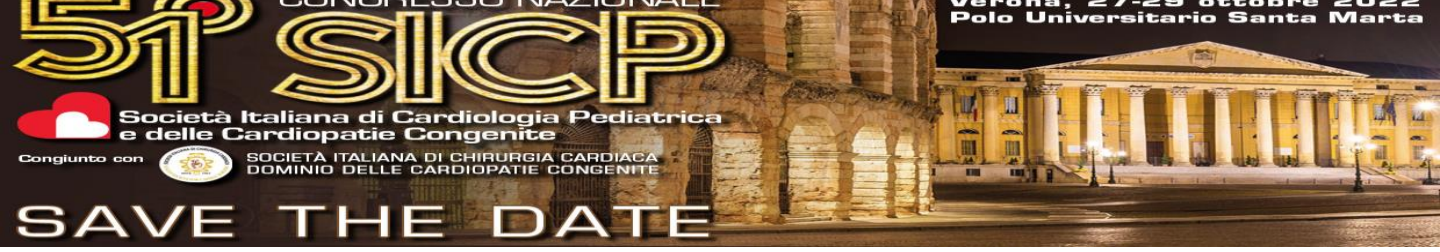

Prenatal diagnosis of left ventricoular aneurysm :a case report

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Case report:

Ventricular outpouching is a rare finding in prenatal sonography and the main differential diagnoses are diverticulum, aneurysm, and pseudoaneurysm in addition to congenital cysts and clefts. The various modes of fetal presentation of congenital ventricular outpouching include an abnormal four-chamber view on fetal two-dimensional echocardiogram, fetal arrhythmia, fetal hydrops, and pericardial effusion. Left ventricular aneurysm (LVA)/nonapical diverticula are usually isolated defects. Apical diverticula are always associated with midline thoracoabdominal defects (epigastric pulsating diverticulum or large omphalocele) and other structural malformations of the heart. Most patients with LVA/congenital ventricular diverticulum remain clinically asymptomatic but they can potentially give rise to complications such as ventricular tachyarrhythmias, systemic embolism, sudden death, spontaneous rupture, and severe valvular regurgitation. The treatment of asymptomatic LVA and isolated congenital ventricular diverticulum is still undefined.

We describe the case of a patient who came to our observation at 24 w for suspicion of a hypoplastic right ventricle, with evidence on fetal echocardiography of marked dilation of the apex of the left ventricle, attributable in size (<1 cm) to diverticulum of the ventricular wall.

Controls were performed at 28 and 31 W, and fetal echocardiographic measurements showing an increase in the size of the extroflexion and initial signs of regional hypokinesiaIn the last check at 31 W, a left ventricular apex aneurysm was highlighted (> 1 cm) with marked depression of the ventricular kinetics and pericardial effusion.

An emergency caesarean section was therefore performed, with a birth weight of the baby of 1.7 kg. The neonatal echocardiogram confirmed the diagnosis of left ventricular aneurysm, apical site with depression of the ventricular function (EF 10%), therapy with inotropes was started with no recovery of function with exitus after 17 g of the newborn.

References

Evolution of ventricular outpouching through the fetal and postnatal periods: Unabating dilemma of serial observation or surgical correctionNiraj Kumar Dipak a,⇑, Sumitra Venkatesh b, Shakuntala Prabhu b, Sudha Rao 2017

Prenatal diagnosis of left ventricular aneurysm: a report of three cases and a review 2008

Prenatal diagnosis of left ventricular aneurysm in the late second trimester: a case report 2000