Results: HeBee is a 3D fetal heart model that allows understanding of global cardiac anatomy and the most useful echographic views. It is composed by pieces that join together and reproduce the 4-chamber view, the 3-vessel view, the left outflow tract and the great vessel view.

Conclusions: Conception of congenital heart diseases models like ventricular septal defects, tetralogy of Fallot, atrioventricular septal defects are also in progress. www.hebee.fr.

Supporting information can be found in the online version of this abstract

P09.11
Tetralogy of Fallot prenatal ultrasound and autopsy correlations
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Objectives: To describe the ultrasonographic markers in the diagnosis of tetralogy of Fallot (TOF) in the fetus, and to evaluate its correlations with classic autopsy aspects.

Methods: The prospective 3-year study assessed 4721 pregnant women undergoing fetal cardiac screening, from 12 to 26 weeks’ gestation, in the Prenatal Diagnostic Unit. We performed standard echocardiographic planes (color Doppler assessment) and in selected cases evaluation of the arches, in the axial upper mediastinum views. The autopsy photographic files were correlated with the video ultrasonographic files.

Results: Congenital heart diseases (CHDs) were diagnosed in a total of 49 (10.37%) fetuses, of a median gestational age of 17 (range, 12-26) weeks. Five of the 49 (10.2% of all CHDs) had TOF, of which 3 cases had classical TOF (pulmonary stenosis), one had Fallot with pulmonary atresia and right-sided aortic arch. The question-mark sign was observed in 3 of 5 cases, the overriding aorta and an abnormal 3 vessels and trachea view was present in all cases. The classic autopsy confirmed both cases terminated in the second trimester.

Conclusions: The results underline recent changes in the gestational age (GA) at the diagnostic of TOF. Unlike the GA when classic autopsy is able to assist the postmortem diagnosis (that remained over 16 WA), the GA when CHDs became accessible to US examination has decreased. This fact leads to difficulties in the autopsy confirmation process in early CHDs suspicion.

Supporting information can be found in the online version of this abstract

P09.12
Anacrotic notch in the aortic isthmus flow waveforms of fetuses with aortic anomalies: pulsus tardus of the fetus?
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Objectives: To test the hypothesis that the anacrotic notch (AN) observed in a preliminary study on the aortic isthmus flow waveforms (Aoi-FWF) of fetuses with aortic stenosis (AoS) may reflect opposite influences of right and left ventricular ejections on blood flow direction through fetal Aoi.

Methods: This is an observational retrospective study on fetuses with isolated valvular AoS. Time to peak velocities (TPV) of FWFs above the aortic(Ao) and pulmonary(PA) valves, and time to the AN on the Aoi were measured and compared.

Results: 11 fetuses were included: 3 bicuspid Aov, 2 mild, 3 moderate and 3 with severe AoS. Seven presented a distinct AN in the Aoi-FWF (Fig.), a finding that has never been described previously. TPVs above the Ao (median: 0.053 sec. ± 0.035 to 0.075) was greater than those above the PA (0.040, ± 0.020 to 0.050). The times to the AN (0.04, ± 0.03 to 0.05) were similar to...