Prenatal evaluation of fetal interrupted aortic arch type A

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Objective
Interrupted aortic arch (IAA) is defined as an anatomic interruption or atresia between the ascending aorta and the descending aorta. It is an uncommon anomaly, which has severe consequences in the postpartum period. It constitutes 1.5% of congenital heart diseases (CHD) and has an incidence of around 2 in 100,000 live births. Here we aim to present a case of prenatally detected IAA.

Methods
This is a case report.

Results
A 24-year-old, gravida 2 parity 1, had an increased nuchal translucency at her first trimester scan. CVS (chorionic villus sampling) was performed the karyotype was normal. For follow-up, fetal echocardiography was performed, demonstrating pericardial effusion, VSD, ventricular hypertrophy and aortic hypoplasia was detected. For further investigation, FISH analysis was performed following amniocentesis. After obtaining a normal FISH result a termination of pregnancy was offered and accepted by the patient at 18+6 weeks gestation. Postmortem evaluation demonstrated Interrupted Aortic Arch Type A, ventricular septal defect, cystic hygroma, renal abnormality, hypopharyngeal and thymic hypoplasia (Di George syndrome).

Conclusion
The assessment of the 3 vessel- trachea view in the early second trimester is not difficult to visualize and forms a vital point in screening for fetal cardiac abnormalities in addition to the evaluation of the 4-chamber view. Vascular abnormalities such as aortic arch anomalies, aberrant right subclavian artery (ARSA), and persistent left vena cava superior (PLSVC) can easily be identified. Even when the results of diagnostic tests like CVS and FISH are negative, important findings on ultrasound and fetal echocardiograms often lead us to the correct diagnosis. Early detection of severe cardiac defects enable us to refer patients to centers where a multidisciplinary approach can be achieved.