

A case of absence of ductus venosus in right atrial isomerism

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Objective

Right atrial isomerism is a complex congenital heart defect which includes two right atria and absence of left sided structures like coronary sinus. It may be complicated with abnormally pulmonary drainage.

Methods

A case report.

Results

A 34-year-old, G1P0, patient with a gestational age of 20 weeks was referred to our center due to suspicion of cardiac abnormality. Fetal biometry was consistent with gestational week at ultrasonography. In the abdominal section, stomach was located on the right, liver was located in the middle line and to the left. Inferior vena cava and ductus venosus were not observed and inferior vena cava-azygos vein showed continuity. Ductus venosus could not be observed. The umbilical vein was opened directly to the right atrium. The findings were evaluated as compatible with right atrial isomerism (asplenia syndrome). The heart was located on the right side and the four vessels and three vessels views were normal. Aortic and pulmonary artery outflow tracts were normal. Both atrial appendages were hook-shaped and morphologically right sided. Unbalanced atrioventricular canal defect was detected while no heart block or arrhythmia was observed. Amniocentesis result was 46, XX.

Conclusion

Fetal heterotaxy syndrome is associated with a high prevalence of heart and extracardiac anomalies. The prognosis of the right isomerism detected in the fetus is usually poor due to the severity of the antenatally detected anomalies. Affected individuals present with severe heart failure at birth.