

Case-of-the-Day Answers

Obstetric Ultrasound

Submitted by

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Clinical History

A 28-year-old woman, G1P0, at 28 3/7 weeks' gestation was referred for a fetal echocardiogram with a heart anomaly suspected on antenatal ultrasound. The fetal biometry was consistent with dates. Good fetal movement, breathing, and tone were observed. The amniotic fluid volume was adequate. Detailed evaluation of the fetal cardiac anatomy demonstrated a complex heart defect. The remainder of the fetal anatomy appeared grossly normal.

**Diagnosis: common arterial trunk type A4
(with interrupted aortic arch type B).**

Discussion

The truncus arteriosus communis or common arterial trunk is an uncommon cardiac anomaly with an incidence of approximately 0.7% of congenital heart disease. Aortic arch interruption is found in approximately 15% of these children, making the combination of these anomalies very rare. Only 2 cases of prenatal diagnosis of this complex heart anomaly were published so far. Patients with both an interrupted aortic arch and truncus arteriosus have worse outcomes than those with either lesion in isolation, including very high early mortality and an increased risk of reinterventions in survivors. Patients with associated noncardiac anomalies and functional truncal valve impairment have a poor prognosis.

Outcome

The infant was delivered vaginally at term with good Apgar scores, went to the neonatal intensive care unit, and the diagnosis was confirmed. Open heart surgery was performed with a single-stage complete repair of the heart defect on day 4 of life. The infant is doing well at 3 months of life.

