

Fetal Cardiac Teratoma in a Twin Pregnancy: A Case Study

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Background

Fetal cardiac tumours are rare, however with rapidly advancing imaging techniques, earlier diagnosis and timely intervention have improved morbidity and mortality. Nonetheless, cases complicated by hydrops and cardiac compression continue to be associated with poorer prognosis, especially in twin pregnancies.

Aim

To examine the antenatal course, multidisciplinary management, and perinatal outcome of a fetal cardiac teratoma in a twin pregnancy complicated by hydrops.

Case Presentation

We present a dichorionic diamniotic twin pregnancy in which one twin was diagnosed with a fetal cardiac tumour, with associated cardiac compression and pericardial effusion. Multidisciplinary input guided management, balancing risks of in utero interventions against risks of prematurity within affected. Pericardiocentesis was performed at 28 weeks temporarily improved cardiac function, though effusion later reaccumulated.

At 30 weeks, monitoring demonstrated worsening hydrops, cardiac contractility and significant pericardial effusion. Ongoing tertiary surveillance and multidisciplinary discussions aimed to prolong gestation and optimise timing of delivery.

Delivery via caesarean section occurred at 35+1 weeks following preterm labour. The affected twin was stabilised at delivery and transferred for surgical management.

Results

Postnatal surgical resection of the cardiac mass was successfully performed. Histopathology confirmed a benign pericardial teratoma. Both twins survived, with a favourable neonatal outcome for the affected twin despite significant antenatal compromise.

Discussion

This case highlights the challenges of managing antenatally diagnosed cardiac teratomas, particularly in twin pregnancies. Multidisciplinary input is required for prognostication, decision-making regarding intervention, and timing of delivery. In this case, it resulted in successful surgical treatment and survival of both twins.