After hysterotomy, the fetal arms and chest were exposed and a 24g peripheral IV was placed in the right hand. IM fentanyl and vecuronium given prior to fetal incision. One unit of PRBCs and FFP were mixed in a single bag for fetal transfusion. In preparation for sudden release of tamponade, a 10 mL/kg bolus of blood was given prior to sternotomy. Continuous fetal ECHO guided further transfusion for surgical blood loss and compression due to manipulation.

Traditionally, delaying delivery and surgical resection is sometimes unsuccessful due to rapid tumor growth after 20 WGA. Development of high output cardiac failure and fetal hydrops can lead to fetal demise or premature birth. We describe successful fetal resection of an intrapericardial teratoma with subsequent continuation of the pregnancy and delivery at 30 WGA. Preparation for fetal hemodynamic changes during these cases is key. Must prevent preterm labor and minimize maternal risk.

FOLLOW-UP: Patient born at 30 weeks 5 days for PROM, subsequently had tumor removed on DOL 19.

Teratomas are the second most common prenatal or childhood cardiac tumor. Large teratomas cause mechanical compression of the heart, great vessels, and lungs, pericardial effusion, and cardiac tamponade. Traditional management goals were to resect postnatally. There is often rapid tumor growth after 20 WGA, which can cause CV compromise and fetal hydrops with high mortality.

We describe a case report of fetal resection of a pericardial teratoma. Case

30 year old G3P1 female presented at 20 weeks 3 days gestation. Fetus had a large intrapericardial teratoma causing high output cardiac failure and fetal hydrops. Echo showed significant right heart compression. Fetal demise expected imminently without intervention. Background

Maternal Management

Preoperative epidural placed at T12-L1
RSI with propofol and succinylcholine.
Intubation with 6.5 cuffed ETT.
Placement of 2nd peripheral IV and arterial line.
Uterine relaxation maintained with high-dose desflurane (10%) and nitroglycerin boluses.
PE infusion and ephedrine boluses used for maintenance of maternal normotension.
Magnesium for tocolysis at the end of the case.
Epidural bolused post op with ropivacaine 0.2%.

Fetal Management

After hysterotomy, the fetal arms and chest were exposed and a 24g peripheral IV was placed in the right hand.
IM fentanyl and vecuronium given prior to fetal incision.
One unit of PRBCs and FFP were mixed in a single bag for fetal transfusion.
In preparation for sudden release of tamponade, a 10 mL/kg bolus of blood was given prior to sternotomy.
Continuous fetal ECHO guided further transfusion for surgical blood loss and compression due to manipulation.

Discussion

We describe successful fetal resection of an intrapericardial teratoma with subsequent continuation of the pregnancy and delivery at 30 WGA. Preparation for fetal hemodynamic changes during these cases is key. Must prevent preterm labor and minimize maternal risk.

FOLLOW-UP: Patient born at 30 weeks 5 days for PROM, subsequently had tumor removed on DOL 19.

References


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