Chorioangioma in Pregnancy

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Background
Chorioangioma is the most common neoplasm of the placenta. It occurs in up to 1% of all deliveries and most often goes unnoticed. Small chorioangiomas are clinically insignificant and diagnosed after delivery. Larger chorioangiomas are rare (1: 3500 to 9000 deliveries) and can lead to clinical manifestations such as polyhydramnios, pre-eclampsia, fetal hydrops and fetal anaemia.

Case Report
A 24-year-old parous lady who had previous two normal deliveries was booked under midwifery led care. Fetal anatomy was normal at 20 weeks gestation. At 32 weeks gestation, on a routine growth scan of the fetus, an enlarged heterogeneous mass was noticed on the placenta near the cord insertion (Fig 1), which measured 7.8 x 7.8x 10cm in size. Colour Doppler showed increased vascularity with a pulsatile flow (Fig 2 & Fig 3). A diagnosis of placental chorioangioma was made. She had regular serial fetal growth and Doppler profiles which were normal. Increased AFI (28cm) was noted from 34 weeks gestation. There was no evidence of fetal anaemia in any of the scans. Our patient had an Elective Caesarean section at 39 weeks gestation for breech presentation. Baby weighed 2.9 kgs and had good apgars.

Placenta was examined after delivery. The chorioangioma on the placenta was confirmed on visual inspection. It measured 12x13x14 cm, was on the fetal side of the placenta and near the cord insertion (Fig 4, Fig5 & Fig 6). Histopathology report confirmed placental chorioangioma composed of innumerable small blood vessels compressed to give, in places, a solid pattern with areas of necrosis in between.

Discussion
The pathophysiology of maternal and fetal complications in Chorioangioma complicating pregnancy is not well understood. Polyhydramnios may be caused by mechanical obstruction of blood by the tumour near the cord insertion, or by increased transudation of fluid through the tumour. Fetal anemia and Fetal cardiomegaly is also a possible complication.

Chorioangioma is mainly managed expectantly as majority of tumours are asymptomatic. Fetal growth profile and size of the tumours need monitoring by serial scans. Prenatal intervention becomes necessary in situations where fetal or maternal complications are noticed. Interventions include fetal blood transfusion, laser coagulation or endoscopic devascularisation of the vessels supplying the tumour. Cases that require intervention usually have poor prognosis. Our patient was completely asymptomatic and there were no fetal complications.

References