Case Report

Placental Chorioangioma: A Case Report

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Abstract

Background: *Placental chorioangiomas are common benign tumors with an incidence of 0.5 to 1% pregnancies. It is mostly diagnosed by ultrasonogram in the second trimester of pregnancy. Large chorioangiomas are known to cause complications in pregnancies while the smaller ones are asymptomatic.* ***Case Report:*** *A 22-year-old 2nd gravid was diagnosed to have a placental mass of about 6 cm X 6 cm chorioangioma during her 20 weeks of gestation. The mass was under regular follow up by serial ultrasonography which was increased to 9.2 cm X 8.0 cm at her 24 weeks of gestation and pregnancy was complicated by per-vaginal bleeding and polyhydramnios. Spontaneous expulsion occurred at 25 weeks of gestation.* ***Conclusion:*** *Though this is the common presentation of placental chorioangioma, interventions like amnioreduction, laser coagulation, alcoholic ablation might have helped to prolong the pregnancy at least upto viable age.*

Keywords: Chorioangioma, Polyhydramnios, Placenta

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Introduction

Placental chorioangioma is the most common benign tumor of the placenta. Its incidence is quoted around 1 in 100 placentas and is seen more frequently in multiple pregnancies and in female babies[1]. Chorioangioma is believed to arise by 16th day of fertilization, although there is no documentation of the tumor in the first trimester[2].

In the majority of cases, they are small or microscopic and of no clinical significance. Rapidly growing large chorioangiomas, more than 4 cm in size, may be complicated by polyhydramnios, fetal cardiomegaly, followed by hydrops fetalis and intrauterine growth restriction[1].

Interventions like amnioreduction, laser endoscopic laser coagulation, and interstitial laser therapy and alcohol injection might help to avoid preterm delivery[1,2].

Case report

Here we reported a 2nd gravid case diagnosed to had a placental chorioangioma of about 6 cm X 6 cm size at her 20 weeks of gestation and increasing size to about 9.2 cm X 8.0 cm at 24 weeks of gestation and spontaneous expulsion occurred at her 25 weeks of gestation.

The 22-year-old second gravid housewife got admitted to Eastern Medical College Hospital on May 2nd, 2018 at her 20 weeks of pregnancy with the complaints of per vaginal bleeding for 4 days which was moderate in amount, continuous in nature and sometimes clotted. There was no associated abdominal pain or fever. She was on regular antenatal checkup.

On admission, she was severely anaemic, non-icteric; pulse: 112 beats/minute; BP: 100/70 mmHg, thyroid gland normal, breasts showing normal pregnancy changes.

Per abdominal examination revealed unduly enlarged abdomen with fullness of the flank and shiny skin, SFH- 24 weeks, fetal heart sound found by color Doppler. Per vaginal inspection revealed presence of active vaginal bleeding.

All routine investigations including Bleeding Time (BT), Clotting Time (CT), Platelet count were sent immediately. Her blood group was AB Positive, Hb level was 5.5 gm/dl, RBC count was 2.6 million/cubic mm, platelet count was 80000/cubic mm, Random Blood Sugar (RBS) was 5.5 mmol/L, BT was 2 min, CT was 5 min, VDRL was non-reactive, HBsAg was negative.

Ultrasonography of the pregnancy profile showed 20 weeks of single life fetal pole with placental mass (chorioangioma of 6.0 cm x 6.0 cm and ascites of mother). Then we followed the placental mass of the patient by the weekly ultrasonography which was

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found to progressively increasing in the size as follows 7.0 cm x 7.0 cm, 7.3 cm x 7.9 cm, 9.2 cm x 8.0 cm respectively.

Later on, Thyroid function tests, Serum β-hCG, Maternal serum AFP were done. Thyroid function test results were within normal range. β-hCG was 29,500 IU/ml. Maternal serum AFP was 164 IU/ml.

After admission, we managed the patient conservatively by 6 units of blood transfusion, progesterone, anti-fibrinolytic, oral prednisolone, folic acid, iron, calcium and phenobarbitone. But at her 25 weeks of pregnancy, she started having lower abdominal pain and spontaneous expulsion of an alive Very Low Birth Weight (VLBW) male conceptus weighing about 700 gm occurred which was referred to Cumilla Medical College Hospital for better management. But it died 2 hours later due to prematurity.

Placenta was retained which was removed manually. There was no active per vaginal bleeding. On inspection of the placenta, intra-placental hemorrhage was revealed. It was sent for histopathological examination which confirmed the diagnosis of chorioangioma.

This case represents the features of a large placental chorioangioma with the complications like polyhydramnios, preterm labor and abruptio placentae.

Discussion

Placental chorioangiomas are the most common benign growth with an incidence of 0.6% in a large retrospective study by Köhnel[3]. Marchetti described three histological patterns of chorioangiomas: angiomatous, cellular and degenerate[4].

The angiomatous is the most common, with numerous small areas of endothelial tissue, capillaries and blood vessels surrounded by placental stroma.

Small chorioangiomas are asymptomatic but once they reach a size of 4-5 cm they can cause maternal and fetal effects like polyhydramnios, preeclampsia, preterm delivery, non-immune fetal hydrops, fetal heart failure/ cardiomegaly, fetal anemia and thrombocytopenia, fetal growth restriction, fetal hydrops, fetal demise, severe neonatal microangiopathic hemolytic anemia, thrombo-cytopenia neonatal death and maternal mirror syndrome[5].

Increased risk of ante- and post-natal haemorrhage[6], abruptio placentae[7] are described as well as ovarian theca lutein cysts and high levels of β-hCG[8] and high level of AFP being associated with chorioangioma[9].

If complications appear late in pregnancy delivery is the choice. Alcohol injection[10], laser coagulation of feeding vessels[11] and micro-coil embolization of the feeding vessels[12] are described for women with fetal complications like hydrops.

A recent literature review commented that further studies are needed to refine the appropriate selection criteria that will justify the risk of this invasive in utero therapy for chorioangiomas[13].

Indomethacin therapy for polyhydramnios is another option, laser coagulation would have been impossible in this patient due to lack of expertise in the country itself but whether an option like alcohol injection or indomethacin could have been tried is still a question. But the clinical course was very rapid and there was not much time left at 25 weeks of gestation.

Conclusion

Interventions in the form of endoscopic laser coagulation may be useful in selected patients on regular fetal monitoring to avoid preterm delivery in women with big placental chorioangioma of size >5 cm by decreased echogenicity, decreased tumor volume and decreased blood flow, thereby fetal hemodynamics and clinical outcome are found to be improved.

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