

CASE REPORT

A CASE OF ATYPICAL PLACENTAL LARGE CHORIOANGIOMA

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ABSTRACT: Chorioangioma of placenta is a relatively rare tumor (0.65-1%), most often it goes unnoticed and presents with complications and hence it has potential serious maternal and fetal risk, necessitating close supervision. We present a case, Primigravida, 21 years with 17 weeks of gestation, with large chorioangioma with abruptio placenta and fetal demise.

KEYWORDS: Chorioangioma, Hemartoma, Ultrasound, abruptio placenta.

CASE REPORT: A 21years old primigravida presented with severe bleeding per vaginum and pain in lower abdomen. On per abdomen examination uterus corresponded to 24weeks, was tense and tender. Per speculum revealed active bleeding through external os with some clots per vaginum. Cervix was firm; admitting tip of a finger blood collected per vagina was positive for fetal Hb. Emergency USG detected a 10cms large isoechoic tumour in posterofundic of placenta. & scan showed fetal bradycardia.

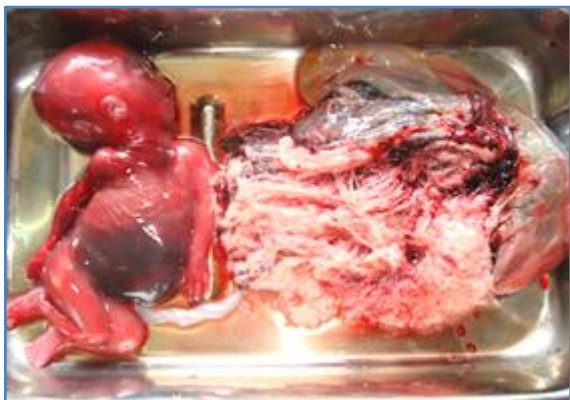


Fig. 1: Gross photography of fetus with mass having extensive vascular channels of varying sizes continuing with placenta.

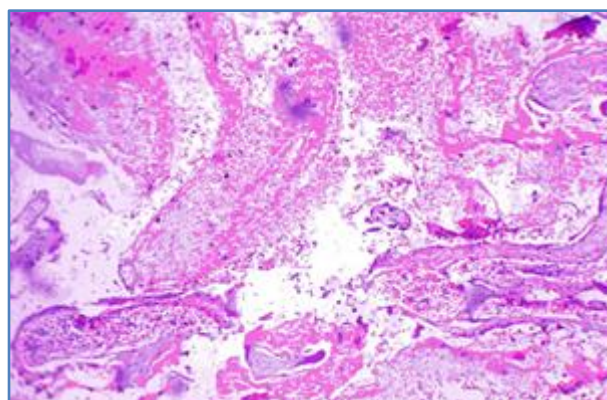


Fig. 2: Microphotograph showing bunch of varying sized thinned walled vessels with extensive necrosis.

Patient Hb was 4gm%. Three bottles of blood was transfused. Repeat bedside USG confirmed IUD. Pregnancy was then terminated with misoprostol & oxytocin, within 2 hours she expelled a dead fetus and placenta enmasse.

Placenta size 17x15x6cms and weighed 876gms. Placenta washed under running tap water for better visibility of gross features. A large 13x10x5.6cms tumour mass with multiple (approx. 500) filament like structure with branching and tapering ends, protruding from the mass synonymous with bunch of bottle brush appearance, the maximum diameter of chord 2.1mm and

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smallest ones are hair sized. The longest filament measured 13cms. Fetal weight: 390gms. Gross external appearance, antenatal 4.2MHz and high resolution postnatal 9MHz USG did not reveal any anomaly. Cutaneous ecchymosis presents over the abdominal wall due to labour through partially dilated cervix. No PPH. Repeat Hemoglobin on 8th postnatal day was 8gm%. Mother was discharged after appropriate measures were adopted to correct the anemia. Clinical diagnosis was Abruptio placenta due to a large rapidly growing Chorioangioma leading to abortion.

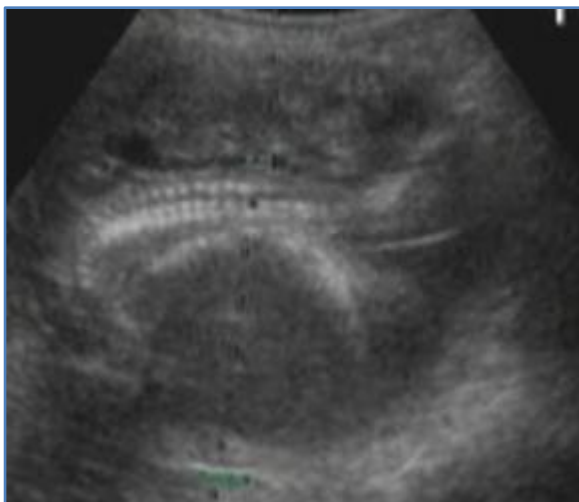


Fig. 3: USG scan showing fetus pushed on one side with severe oligo, head extended and right heart failure.

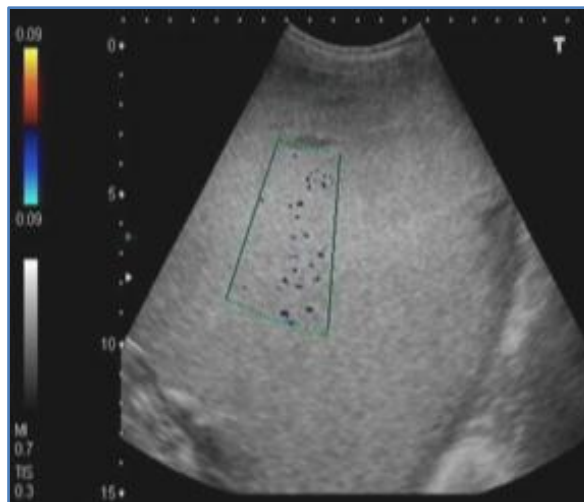


Fig. 4: USG scan showing large anemic placenta due to fetal hemorrhage.

Histopathological study: Samples obtained from four different areas (a) base of largest filament [findings revealed vascular structure, from inside-out, RBCs in the centre lined by endothelium, muscular layer, outer by adventitia], (b) tip of filament [Capillaries with congested RBCs], (c) thrombosed area [vascular sinusoids filled with thrombus surrounded by syncytial trophoblast and stroma which is typical findings of Chorioangioma], (d) normal looking placenta [Normal placental findings]. **Impression:** Findings suggestive of atypical Chorioangioma where large arterial vasculature without thrombosis is the major component than the capillary sinusoids with thrombosis.

DISCUSSION: Chorioangioma is benign vascular tumour arising from primitive chorionic mesenchyme with unknown etiology. It is the most common placental tumor. ⁽¹⁾ Elevated α -fetoprotein ⁽²⁾ and / or β -HCG ⁽³⁾ may arouse suspicion, but are inconclusive. Antenatal diagnosis is mainly through Ultrasound Doppler findings of hypo/hyper echoic lesion detected in placenta with differential diagnosis of Toxoplasmosis lesions, Placental hematoma, Placental teratoma, Degenerating submucous fibroid, Normal sinusoids deceased twin sac, ⁽⁴⁾ Misleading Uterine anomalies having irregular uterine cavity. All these can be differentiated by Doppler studies. Fetal risks include non-immune hydropsfetalis, cardiomegaly, CCF, fetal anemia, fetal thrombocytopenia, fetal consumptive coagulopathy, IUGR, sudden infant death, prematurity. Most authors categorize chorioangiomas as neoplasms. However, there is some debate as to

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whether they are actually hamartomas, given their composition of mostly native placental tissue and their inability to metastasize.⁽⁵⁾ Chorioangiomas have no malignant potential. Three histologic types of chorioangiomas have been described: angiomatous (capillary), cellular and degenerative, with angiomatous as the most common type. Chorioangioma should be considered as a rare entity in the differential diagnosis of an elevated level of maternal α -fetoprotein in the serum. To prevent or treat the complications of chorioangioma various interventions have been tried with varying success. Antenatal USG guided interstitial LASER therapy,⁽⁶⁾ Amnioscopic (endoscopic) devascularisation by suture or Bipolar cautery,⁽⁷⁾ Microcoilembolisation, Alcohol injection,⁽⁸⁾ Intrauterine fetal blood transfusion to treat fetal anemia,⁽⁹⁾ Cerebral & umbilical artery Pulsatility Index to guide blood transfusion, Polyhydramnios by amniocentesis and Indomethacin.⁽¹⁰⁾

CONCLUSION: Our case has typical part (4cms) and atypical part (13cms) with large bunch of vessels. Vessels were pale on gross examination due to fetal massive hemorrhage and anemia. Doppler studies did not help due to same reasons. Larger and rapidly growing Chorioangiomas are notorious for complications. Hence close monitoring of lesion size & growth rate with the help of ultrasonography, fetal echocardiography and Doppler wave form is recommended to pick up complications as early as possible, so that they can be treated timely & effectively. There is enough scope for continuation of pregnancy in the literature.⁽¹¹⁾

REFERENCES:

1. Guschmann M, Henrich W, Entezami M, Dudenhausen JW: Chorioangioma-new insights into a well-known problem. I. Results of a clinical and morphological study of 136 cases. *J Perinat Med.* 2003; 31(2): 163-9.
2. Khong TY, George K: Maternal serum alpha-fetoprotein levels in chorioangiomas. *Am J Perinatol* 1994; 11: 245-8
3. Bashiri A, Maymon E, Wiznitzer A, Maor E, Mazor M: Chorioangioma of the placenta in association with early severe polyhydramnios and elevated maternal serum HCG: a case report. *Eur J ObstetGynecolReprod Biol.* 1998 Jul; 79(1): 103-5.
4. Batukan C, Holzgreve W, Danzer E, Bruder E, Hosli I, Tercanli S. Large placental chorioangioma as a cause of sudden intrauterine fetal death. A case report. *Fetal DiagnTher.* 2001 Nov-Dec; 16(6): 394-7.
5. Harris RD, Cho C, Wells WA. Sonography of the placenta with emphasis on pathological correlation. *Semin Ultrasound CT MR* 1996; 17(1): 66–89. [Cross Ref][Medline]
6. Bhide A, Prefumo F, Sairam S, Carvalho J, Thilaganathan B. Ultrasound-guided interstitial laser therapy for the treatment of placental chorioangioma. *Obstet Gynecol.* 2003 Nov; 102(5 Pt 2): 1189-91.
7. Lau TK, Leung TY, Yu SC, To KF, Leung TN. Prenatal treatment of chorioangioma by microcoilembolisation. *BJOG.* 2003 Jan; 110(1): 70-3.
8. Nicolini U, Zuliani G, Caravelli E, Fogliani R, Poblete A, Roberts A. Alcohol injection: a new method of treating placental chorioangiomas. *Lancet.* 1999 May 15; 353(9165): 1674-5

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9. Haak MC, Oosterh of H, Mouw RJ, Oepkes D, Vandenbussche FP. Pathophysiology and treatment of fetal anemia due to placental chorioangioma. *Ultrasound Obstet Gynecol.* 1999 Jul; 14(1): 68-70.
10. Kriplani A, Abbi M, Banerjee N, Roy KK, Takkar D. Indomethacin therapy in the treatment of polyhydramnios due to placental chorioangioma. *J Obstet Gynaecol Res.* 2001 Oct; 27(5): 245-8.
11. Esen UI, Orife SU, Pollard K. Placental Chorioangioma: a case report and literature review. *Br J Clin Pract.* 1997 Apr-May; 51(3): 181-2.

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