Case Report

Pedunculated Chorangioma of Placenta - an Extremely Rare Case Report

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ABSTRACT

Pedunculated chorangioma is extremely rare type of chorangioma. To the best of our knowledge, no case has been reported in Indian literature. We report one such rare case in a twenty two year old primi gravida who delivered a full term live female baby by lower section caesarian section (LSCS). Gross examination revealed a nodular mass attached to the placenta by a pedicle. Histopathological examination confirmed it as chorangioma. The clinicopathological and radiological feature of this rare entity is presented with a brief review of literature.

Key words: **Chorangioma, Placenta, Pathology, India**

Introduction

Chorangioma is the most common benign tumor of the placenta (1). The neoplasm arises from the chorionic mesenchyme (2). Chorangiomas are found in approximately 1% of all examined placentas. They are usually small and entirely intraplacental. Large tumors distorting either the chorionic or the basal placenta are rare. Exceptionally, a chorangioma may be found attached to the placenta by a thin pedicle (pedunculated chorangioma) (3). The incidence of pedunculated chorangioma in Indian literature is limited to sporadic case reports only.

The aim of this paper is to present the clinicopathological, sonological and therapeutic outcome data of a similar case with a brief review of literature.

Case Presentation

A twenty-two year old primigravida delivered a live baby at 36 weeks gestation by lower segment caesarian section (LSCS). During her antenatal visit at 34 weeks, ultrasound examination revealed two hypoechoic areas - one within the

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placenta measuring 5.7×5.1cm and the other as lobulated mass arising from the placenta lying separately measuring 8.4×5.8 cm. Lobulated mass also showed vascularity. The provisional sonographic opinion was large placental cyst or chorangioma of placenta. No other antenatal complaints were recorded. She was taken up for elective LSCS as she was suspected to have large pedunculated chorangioma of placenta. She delivered a female baby of 1.86 Kg. Recovery of the patient was uneventful. She was discharged with the baby on the 7th post operative day.

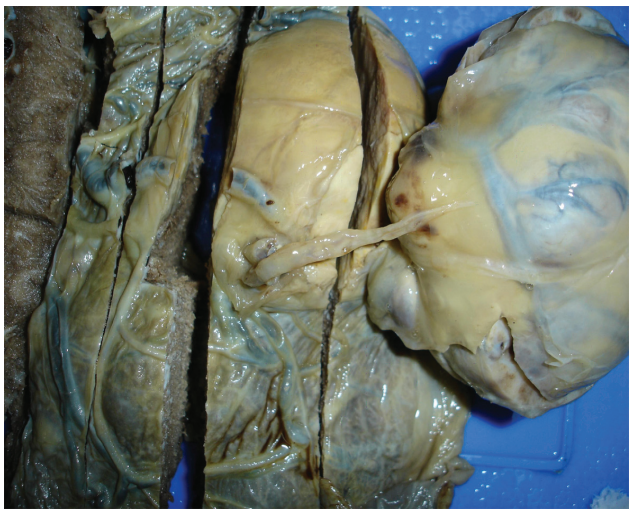

Fig. 1: Gross picture of the placenta showing intraplacental and pedunculated chorangioma

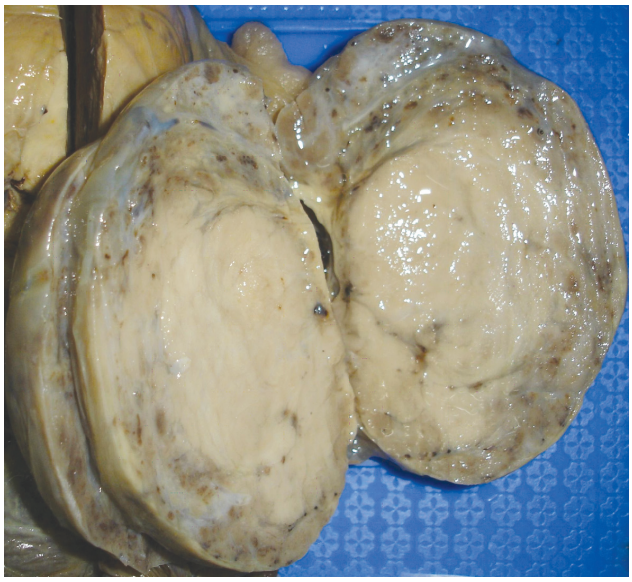

Fig. 3: Cut surface of the pedunculated mass

Pathologic Findings

Gross Examination

Placenta with membrane measured 18×16×4.5 cm and weighed 1020 grams. Cord measured 20 cm in length and insertion was marginal. One grey white nodular mass within placenta was seen measuring 7.5×6.5×4.5 cm. Another nodular mass measuring 10.5×7×6 cm was attached to the placenta by a pedicle (Fig.1). Cut section of mass within the placenta appears nodular, tan yellow and well circumscribed (Fig. 2A). Cut section of the pedunculated mass appears nodular and grey white (Fig. 3). Cut section of the cord appeared normal showing two arteries and one vein.

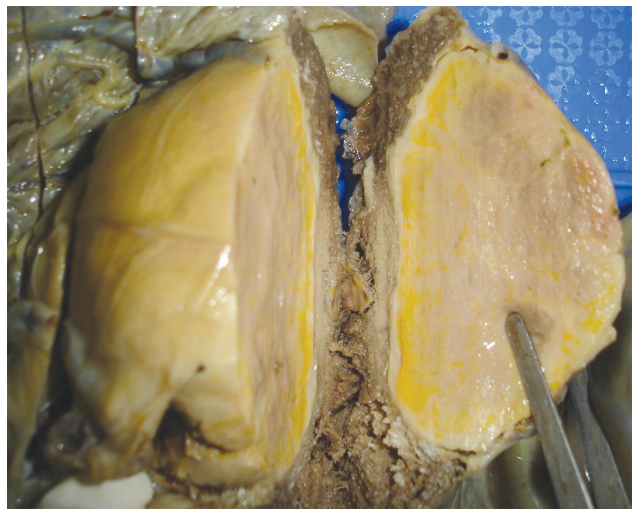

Fig. 2: Cut surface of the intraplacental mass

Microscopic examination

Hematoxylin and eosin stained paraffin embedded tissue sections from the mass within the placenta and the pedunculated mass revealed similar histomorphology. Tissue sections showed back-to-back arranged thin walled congested capillaries consistent with placental chorangioma (Fig. 4).

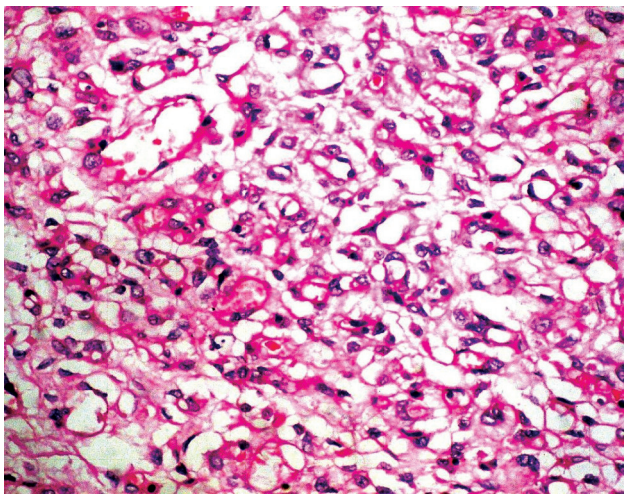

Fig. 4: Section shows closed packed capillaries (H&E ×400).

Besides these, coagulative necrosis and hemosiderin pigment were seen in the sections from the intraplacental mass. Rest of the placenta appeared morphologically within normal limits.

Discussion

Placental hemangioma (chorangioma) occurs in about 1% of carefully examined placentas. Large tumors distorting either the chorionic or basal plates of placenta are rare and exceptionally a chorangioma is attached to the placenta by a thin pedicle. In our case, we had both an intraplacental and pedunculated chorangioma. Chorangiomas are usually solitary, but they may be multiple or rarely involve placenta diffusely (3).

Chorangiomas may be brown, yellow, tan, red or white and are usually firm and well demarcated from the surrounding parenchyma. Most chorangiomas are composed of numerous blood vessels, usually capillaries, but occasionally cavernous in type supported by inconspicuous loose stroma. Occasionally they are more cellular or show prominent myxoid change, hyalinization, necrosis or calcification. Mitotic figures and nuclear atypia have been reported in some chorangiomas. This case showed capillaries arranged back to back with no cellular atypia. Although large chorangiomas are known to be associated with various complications such as fetal cardiomegaly, congestive cardiac failure, fetal hydramnios, and premature delivery, none of the complications were evident in the present case. Skin angiomas have been reported in few babies with placental hemangiomas. Other fetal complications including anemia and thrombocytopenia may reflect sequestration of cellular elements as they traverse the chorangioma (3).

Intra uterine neonatal death results due to severe fetal distress caused by left to right shunting of blood across the tumor. The tumor acting as a physiological dead space thereby returning oxygen depleted blood to fetus causing fetal anemia. In our case the baby was normal and no complications were seen. An antenatal diagnosis of placental chorangiomas especially large one with clinical significance is possible by ultrasonography (4).

Color Doppler imaging is important not only for differentiating chorangioma from other placental lesions but also for confirming that vascular channels in the tumor are continuous with fetal circulation thus ruling out other diagnosis such as degenerated myoma, placental teratoma and incomplete hydatidiform mole (5). One rare case of pedunculated chorangioma has been reported in Chile where the patient presented with preterm labour (6).

This is a first case of chorangioma–pedunculated type in India, with no fetal complications. It is common to have high fetal death rates and other complications such as hydramnios and premature delivery, fetal anemia, cardiomegaly and congestive cardiac failure associated with large placental chorangiomas. Besides, retention of the detached angiomatous mass may cause

post partum hemorrhage as the pedicle is really membranous and will easily be missed unless diagnosed earlier by Ultrasonogram.

Acknowledgement

The authors declare that there is no conflict of interest.

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