Succenturiate Placenta: A Rare Variant In Rivers State Nigeria (A Report Of One Case)

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ABSTRACT

Background: The objective of this paper is to highlight the complications associated with succenturiate placenta in pregnant women.

Methods: A case report of succenturiate placenta. Thorough examination of the placenta grossly and histologically as well as autopsy of the fetus following standard procedure to confirm the gestational age and to ascertain the cause of death was undertaken by the authors.

Result: The succenturiate lobe was attached to the major placenta by fibrous tissue which was transversed by blood vessels. The visceral surface showed haemorrhagic necrosis and thrombosis and these led to placental insufficiency resulting in fetal death.

Conclusion: This rare placental abnormality showed that abnormal placental can be responsible for intrauterine fetal death. This can be detected through the use of ultrasonography.

KEYWORDS: Succenturiate Placenta; Complications; Port Harcourt.

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INTRODUCTION

The normal mammalian placenta is an apposition or fusion of the fetal membranes to the uterine mucosa, being physiologically responsible for gaseous and nutrient exchange between mother and fetus¹. The normal placenta which occupies about one fifth of the surface of the chorionic sac together with the cord and contigous membrane weighs 450-500 grams, which is about one sixth of the fetal weight¹.

One of the rare abnormalities of the placenta is the accessory placenta or the succenturiate placenta that is connected to the principal portion of the placenta merely by vessels and membranes. The gross variation of this type is without clinical significance except occasionally where the vessels connecting the aberrant lobe with the main portion of the placenta traverse the region of the internal os, a condition called vasa praevia. These vessels occasionally rupture in the course of labour leading to severe haemorrhage and fetal death². The succenturiate lobe may also be implanted low

(placenta praevia) which may separate prematurely to cause retroplacental haematoma or frank bleeding². The authors are not aware of any report on this subject in Rivers State and therefore deemed it necessary to highlight the complication that may arise from it.

CASE REPORT

A 34 year old booked gravida four, para three plus zero woman was scheduled for elective caesarian section for post term (43 weeks). She defaulted and much later, presented in the labour ward with a history of severe abdominal pains and tiredness and admitted a history of abdominal massage. She was examined and investigated and was found to have a low haemoglobin level of 7.0g% and fetal bradycardia. No sooner afterwards, she delivered a dead male child per vaginam weighing 3.2kg and a crown-heel measurement of 51cm. The third stage of labour was problematic as one of the placenta easily detached while the other was still attached to the uterine wall, which was manually removed.

On examination, the placentae were unequal in size but connected by an isthmus of placental membrane that was transversed by a blood vessel (Fig.1). The two weighed 0.78kg and the umbilical cord was attached to the larger one. The visceral surface (Fig. 2) showed massive tissue necrosis, retroplacental haematoma, thrombosis of some of the vessels and haemorrhage. The larger placenta was attached to the dead fetus where the above features predominated.

Maternal condition improved with uneventful period in the hospital after treatment. She was counselled and discharged home after three days and was also booked for a follow-up examination in six weeks time.

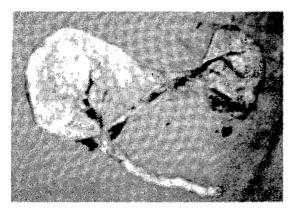


Figure 1. The Succenturiate lode is attached to the major placenta by a blood vessel and fibrous tissue

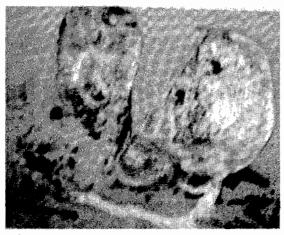


Figure 2. The visceral surface showed massive tissue necrosis, haematoma, thrombosis and haemorrhage.

DISCUSSION

Obstetric practice in the rural Rivers State is still in the infantile stage since they are manned mainly by the traditional birth attendants (TBAs) who have very little or no training. The same is applicable to most maternities in the urban centre as most of them are manned and managed by auxillary nurses and midwives who are by training unskilled.

Our patient presented with fetal bradycardia and post term pregnancy which was enough reason for a caeserian section but probably she must have sought for alternative antenatal care due to high cost of caesarian section or the fear of surgery. She finally presented when the fetus had developed severe complication and was probably dying. She admitted to abdominal massage which is a common practice in this environment by the TBAs. This may be responsible for the retroplacental haematoma from rupture of some of the blood vessels or

premature placental detachment. The retroplacental haematoma, massive necrosis, thrombosis of some of the vessels must have led to inadequate tissue perfusion of oxygen and nutrients resulting in intrauterine fetal death. The feto-placental weight ratio in this communication is 5:1 as against the normal 6:1 ratio³. This disparity indicates that, the accessory placenta was not an integral part of the bigger placenta in which the fetus was attached. The weight of the two was greater than what it should have been; this may also account for the difference in the feto-placentral ratio. The crown-heel anthropometry of the fetus was 51cm which according to Haase's rule of thumb (crown-heel length divided by five give the age in months when the fetus is 25cm and above and square root if 25cm and below) gives the age as 10months and 6 days^{4,5}. This age also confirm the post date of the fetus.

Placenta succenturiata is very rare not only in this environment but also in other parts of the world (USA) where only 3% of succenturiate placenta was recorded. It is therefore necessary to be aware of this condition and to meticulously inspect the placenta and membrane to avoid retention of the aberrant lobe inside the uterus after delivering the main placenta. If this is missed or mismanaged, it will further lead to severe maternal bleeding and may serve as a nidus for infection which may lead to septic shock. The expected precaution can only be taken where labour is conducted by skilled personnel in good obstetric care centres.

This rare placenta abnormality showed that abnormal placenta can be responsible for intrauterine fetal death. This can be detected through the use of ultrasonography.

REFERENCES

- Paurestein CJ. Abnormality and diseases of the placenta and appendages other than hydatidiform mole and choriocarcinoma. In: Novak ER, Woodruff JD. Novak's gynaecologic and Obstetric Pathology with Clinical and Endocrine relations. 8th Edition. Philadelphia: WB Saunder Coy, 1979:594-600.
- Gersell DJ, Kraus FT, Riffle MB. Disease of the placenta. In: Blaustein's Pathology of the Female Genital Tract. 3rd Edition. New York: Springer verlag Coy, 1987:769-834.
- Abdul-Karim RW, Nesbitt REL, Drucker MH, Rizk PT. The regulatory effect of estrogen on fetal growth 1. Placental and fetal body weight. Am J Obstet Gynecol 1971; 109:656-660.
- Knight B. Infanticide and still birth. In: Forensic Pathology. 2nd Edition. London: Edward Arnold Coy, 1992: 412-413.
- Seleye-Fubara D, Uzoigwe SA. Maternal Mortality from ruptured ectopic pregnancy in Rivers State of Nigeria: Analysis of 38 autopsies performed in 12 years. Sahel Med J 2003;6:108-111.
- Fox H. Aging of the placenta. Arch Dis Childhood 1997; 77: 165-170.