GASTROCHISIS: A RARE CAUSE OF INTRAUTERINE FETAL DEATH

*EZEM B.U., MB.BS, FWACS, FMCOG, FRCOG
OKEUDO C., MB.BCh, FWACS

Imo State University Teaching Hospital, Owerri, Nigeria

ABSTRACT

The patient booked at thirteen weeks gestation and developed hydramnios at thirty two weeks gestation. Three ultrasound scans done during the pregnancy were reported as normal. She presented in transverse lie with fetal death ten days post date. At caesarean section a macerated fetus with gastrochisis was delivered. The post operative period was uneventful. Although gastrochisis has a good prognosis and is not a difficult diagnosis to make it is often missed by sonographers with disastrous consequences. This case is presented to highlight this so that sonographers will endeavour to exclude it whenever a pregnancy scan is done particularly in the investigation of hydramnios.

KEY WORDS: Gastrochisis, Hydramnios, Fetal death

INTRODUCTION

A congenital abnormality rate of 0.75% at delivery has been reported in Nigeria.[1] One of the rarer abnormalities is gastrochisis which is a defect in formation of the full thickness of the anterior abdominal wall. It has a prevalence of 0.4-0.8/10,000 live births[2] and is said to be on the increase. This condition is of unknown aetiology and is most often seen in female babies as a small defect 2- 4cm in diameter on the right side of the umbilical cord insertion. Through it small intestine and sometimes large intestine escape into the amniotic fluid. Its early detection is desirable as prognosis is potentially good.

Corresponding Author: DR EZEM B. U.
Department of Obstetric and Gynaecology,
Imo State University Teaching Hospital, Owerri,
Imo State, Nigeria.
E-mail: firstezem@yahoo.com

CASE REPORT

Mrs JA, a 29 year old Para1+1, booked for antenatal care at thirteen weeks' gestation. Her first pregnancy was uneventful and resulted in a normal delivery at term while the second ended in a miscarriage. Her booking parameters were within normal limits. An early ultrasound scan at thirteen weeks' gestation was reported as normal and consistent with her LMP. The pregnancy progressed normally and a repeat ultrasound done at 21 weeks gestation was reported again as normal. At 32 weeks gestation hydramnios was detected. The amniotic fluid index of 35mm was reported; no congenital abnormality was detected. At her last visit at 39 weeks gestation the fetus was in longitudinal lie with cephalic presentation. The placenta was anterior and fundal while the fetal heart was regular at 144 beats per minute. The patient presented in labour ten days after her expected date of delivery. The membranes had ruptured, the cervix was 4 cm dilated and the baby was in transverse lie. No fetal heard was heard. A diagnosis of Transverse lie in labour with intrauterine death was made. An emergency caesarean section was performed and a macerated male baby weighing 2.5kg was delivered. Loops of small intestine were seen protruding from a 4cm defect on the right side of the umbilical cord insertion (Fig1). There was no covering membrane. The postoperative period was uneventful and the patient was discharged after six days. The baby showed no other gross abnormalities and the parents declined a post mortem

DISCUSSION

Gastrochisis is a rare abnormality and is to be differentiated from omphalocele which unlike the former involves the umbilicus and has a covering membrane. It may be detected by

transvaginal ultrasound as early as twelve weeks[3] gestation but is commonly detected in the mid trimester. However it may be missed even where ultrasound is available as was the case here. Abdur-Rahman et al[4] reported that despite the availability of ultrasound in a tertiary centre only one of seven of their cases was detected prenatally. Its diagnosis by ultrasound is not difficult and this case shows that it should always be sought for especially where hydramnios manifests as it is associated with about 76.4%[5] incidence of congenital abnormality. Gastrochisis is hardly ever associated with other abnormalities and thus has a good prognosis. Early diagnosis may be aided by the use of alpha feto protein screening of maternal serum which is rarely available in developing countries. Caesarean section offers no advantage over vaginal delivery and was done in this case for purely obstetric reasons. Delivery at 38 weeks when detected is recommended as it is associated with the best outcome.[6] Treatment is surgical but mortality rate in developed countries is much lower (4%)[7] than in developing countries (57.1%).[4,8]

CONCLUSION

A high index of suspicion for congenital abnormalities should be maintained particularly where hydramnios occurs and gastrochisis should be one of the abnormalities to be excluded.

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FIG 1: MACERATED BABY WITH GASTROCHISIS

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