Foetus Papyraceous In Twin Pregnancy – A Case Report

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Citation

R Kursheed, A Ahmed, K Parveen. *Foetus Papyraceous In Twin Pregnancy – A Case Report*. The Internet Journal of Gynecology and Obstetrics. 2008 Volume 11 Number 2.

Abstract

INTRODUCTION

Single foetal death in twin pregnancies is not common, the reported incidence ranges from 0.5% to $6.8\%_1$. Most of the single foetal demise occurs in monochorionic twin pregnancies. Death of one twin in first trimester with vanishing twin syndrome is relatively common (up to 29%) and the pregnancy usually continues with little adverse effect on the mother and twin. But death of one twin in second or third trimester is more serious with an increased risk for surviving twin and possibility of maternal disseminated intravascular coagulation₁ (DIC). It is emphasized that a close high-risk obstetric management must be used and a careful paediatric follow up must be done afterwards₂.

CASE REPORT

A 28-year-old gravida 2, para 1, with previous normal delivery presented at our hospital at 26 weeks gestation on 21-02-2008 in OPD with a twin pregnancy with single foetal demise diagnosed on an ultrasound (USG).

Figure 1

Figure 1. Normal baby with foetus papyraceous



Patient had conceived spontaneously and had begun pre-

natal care at 10 weeks of gestation in our hospital with no specific complaints. An obstetric ultrasound examination was done at 16 weeks which revealed a twin pregnancy. She had a regular ante-natal check up in our hospital. Then a follow up USG was done, which showed a viable twin (A) with 26 weeks gestation with cephalic presentation with biparietal diameter (BPD) of 70 mm and FL (femur length) of 50 mm and fundal posterior placenta and a non-viable twin B of 16 to 17 weeks gestation with BPD of 40 mm and FL of 30 mm and anterior fundal placenta. Doppler flow study showed a normal flow in umbilical artery of twin A. Patient was admitted one week prior to EDD (expected date of delivery).

HOSPITAL COURSE

Patient was managed conservatively with baseline haemogram, coagulation profile and renal function tests weekly. Foetal monitoring was done with daily foetal movement counts, NST (Non-stress tests) repeated every alternate days. USG was also repeated which showed satisfactory growth of twin A. Ante-natal steroid prophylaxis was given. Patient also developed pregnancy-induced hypertension at 38 weeks of gestation for which she was given methyl dopa 500 mg BD. Patient was admitted one week prior to EDD and was induced with misoprostol 25 microgram. Patient was induced and after 7 hours, the patient delivered twin A which was alive female with an apgar score of 8/10. Weight of live baby was 3 kg and that of placenta 400g. Patient delivered dead foetus papyraceous weighing about 100g with placenta weighing 50g. Inspection of placenta showed diamniotic dichorionic placenta. Amount of blood loss was 250 ml. Blood group of mother was B negative and that of alive baby was AB negative.

DISCUSSION

Ante-natal demise of one foetus in the late second or third trimester of twin pregnancy confronts the obstetricians with

an unusual and difficult problem with regard to management of pregnancy₃. In multiple pregnancy, foetus papyraceous or compressus results when a foetus dies in utero early (usually in early second trimester between 15 to 20 weeks) and is not expelled out resulting in its atrophy and mummification. It is the macerated, tiny fully-formed foetus which is usually dry and papery because the amniotic fluid and fluid content of dead foetal tissue and of placental tissues get absorbed and dead foetus gets flattened and compressed between the membranes of living co-twin and uterine walls. Foetus papyraceous can occur in both uniovular and biovular twins but is more common in uniovular twins. Affect on surviving twin depends on chorionicity. In dichorionic twins, prognosis is relatively good. Monochorionic twins have poor prognosis and there are more chances of neurological and structural damage in surviving twin due to placental vascular anastamosis4.

It is recommended that all twin pregnancies with one dead foetus should be managed in tertiary referral centre with sufficient neo-natal support. If foetus papyraceous is diagnosed ante-natally, serial evaluation of surviving foetus by USG, bio-physical profile, Doppler study and maternal coagulation factors should be done serially as an important maternal hazard in association with retention of dead foetus is DIC and is seen in cases where retention is for 5 weeks or longer. The most feared sequelae is neurologic damage of the survivor. This probably results from transfer of thromboplastin from the dead twin, producing thrombotic arterial occlusions. These occlusions mainly affect anterior and middle cerebral arteries causing multi-cystic encephalomalacia, microcephaly, porencephaly, ventriculomegaly and cerebral palsy5. Extracranial abnormalities include small bowel atresia, gastrochisis, hydrothorax, renal cortical necrosis and aplasia cutis. Placenta should be examined microscopically and histologically to determine placentation.

CONCLUSION

The sequelae of single foetal death in a twin pregnancy depend on gestation and placentation. Conservative management is preferred. Adequate counseling, psychological support and long-term follow up are mandatory.

References

 Enbom JA. Twin pregnancy with intrauterine death of one twin. Am J Obstet Gynecol 1985; 152: 424-9
Puckett JD. Foetal death of second twin in second trimester. Am J Obstet Gynecol 1988; 159: 740-1
Santema J G, Swaak AM. Expectant management of twin pregnancy with single foetal death. British J Obstet Gynaecol 1995; 102: 26-30
Fusil Gordon H. Twin pregnancy complicated by single intrauterine death, problems and outcome with conservative management. Br. J Obstet Gynaecol 1990; 97: 511-16
Yoshioka H. Kadamotoy. Multicystic encephalomalacia in live-born twin with a stillborn macerated co twin. J Pediatr 1979; 1995: 798-800

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