

Fetus Papyraceous - A Case Report With Successful Maternal and Fetal Outcome of the Triplet

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Abstract: Fetus papyraceous is defined as a compressed fetus, mummified, parchment-like remains of a dead twin or triplet that is retained in-utero after intrauterine death in the second trimester. We report a case of two fetus papyraceous (FP) in triplet pregnancy with no maternal and fetal complications during pregnancy or the post-partum period.

Keywords: fetus papyraceous, twin pregnancy, triplets, fetal death, pregnancy outcome.

I. Introduction

The retention of a mummified parchment – like remains of a dead fetus(es) in multiple pregnancy in the second trimester of pregnancy in association with a viable twin is known as fetus papyraceous.[1,2] Its incidence is 1 in 17,000-20,000 pregnancies or 2.3% of all twin pregnancies.[2,3] The incidence of two fetuses papyraceous in a triplet pregnancy is 1 in 32,800.[4] The incidence quoted is likely to be higher in Nigeria, a country with the highest twinning rate in the world.[5] In Nigeria where 36% of mothers do not receive antenatal care and with 62% of births taking place at home[6] the true incidence of fetus papyraceous or any complication of multiple pregnancy is likely to be underreported. Disseminated intravascular coagulation (DIC) which complicates demise of singleton pregnancies especially if prolonged is uncommon with fetus papyraceous.[7]

II. Case Report

A G3P2+0+0+2 at term reported in the labour room of Regional Institute of Medical Sciences, Imphal at 10.00 pm of the 22.12. 2014, with complaint of abdominal pain for 4 hrs before reporting to the hospital. She had a family history of triplet pregnancy & a twin pregnancy in her real mother. Antenatal check- ups were not done in any of the local Dispensary and no obstetric ultrasound was done. She was well built with fair nutrition. Her ABO group is A with Positive Rh Typing with 10.8 gm% Hemoglobin. Pelvic examination revealed a flattened, compressed multiple fetal mass/ parts over the bulging bag of membranes later diagnosed as fetus papyraceous in the vaginal cavity (Fig. 2). Cervical Os is 6-7 cms dilated with fully effaced cervix and a bulging membrane which spontaneously ruptured, expelling the fetal mass outside the vaginal cavity (Fig. 1). She delivered vaginally a single live healthy male baby weighing 3.1 kgs with Apgar Score of 8/10 and 10/10 at 1 and 5 minutes respectively. Placenta carefully delivered completely along with the membranes. A centrally attached triple vesseled umbilical cord of the normal baby was seen (Fig.3). No immediate third stage complications noted. The placenta weighed 480gms. The papyraceous twins were about 13.5 cms and 9.5 cms in length respectively, flattened parchment- like and compressed.

The mother and the normal baby were discharged one day later with uneventful post- partum period.



Fig.1



Fig.2

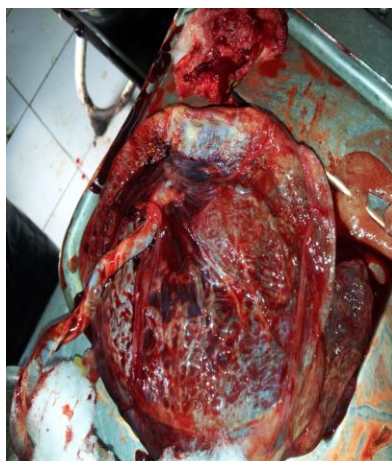


Fig. 3



Fig.4

III. Discussion

Fetus papyraceous is a rare entity observed in 1 in 17,000 to 20,000 pregnancies seen as a result of antenatal demise of one of the foetuses in a multifetal gestation. The dead fetus got compressed between the membranes with absorption of the fluid content of the dead fetal and placental tissues rendering it tiny, flattened and mummified. This condition can pose a risk to both the mother and the remaining fetus during the course of pregnancy.

The condition is difficult to diagnose if antenatal visits with obstetric ultrasound are not done, thus many a times diagnosed only after delivery. Multifetal gestation can be diagnosed as soon as 4 weeks after conception with Transvaginal Sonography. In late second and third trimesters it is not always possible to diagnose fetus papyraceous by ultrasound examination.

Perinatal mortality of monochorionic twin pregnancies is higher than with dichorionic twins. McPherson and colleagues investigated an association between chorionicity and intrauterine fetal demise (IUFD) of one or both fetuses in twin pregnancy. The study was performed on 2161 twin pregnancies; 86 had at least 1 IUFD and 32 had a double fetal loss. Consequently, they found that monochorionic pregnancies had an increased risk of a single demise and a double demise, mostly at 24 weeks of gestation. This led them to put forward that monochorionic twins carry an increased risk of fetal death compared to dichorionic twins.

Another study by Dickey, et al. showed that spontaneous reduction of one or more gestational sacs occurred before the 12th week of gestation in 36% of fetal demise of a singleton pregnancy, 70% of all double demise twins, 53% of triplets and 65% of quadruplet pregnancies. In another study, fetal death at 20 weeks gestation or later was rare, occurring in 2.6% of the twins and 4.3 % of the triplets. The data obtained from these studies showed that the survival of the remaining foetuses was inversely related to the time of the first fetal demise, and an increased risk of fetal death was associated with monochorionic placenta, disproportionate sharing of placenta, and monozygosity. Conversely, death of a co-twin in the first trimester is a relatively common event, leading to vanishing twin.

Complications of a fetus papyraceous on the surviving twin include intrauterine growth restriction, congenital disorders, cord complications, pre-term labour, and prematurity. Risk of cerebral impairment of the surviving twin is about 20% with corresponding increase in the incidence of cerebral palsy. There is also a high potential for twin embolisation syndrome in 25 % of the surviving twin. Dystocia is possible when the dead fetus lie transversely when the event happens in the late 2nd and 3rd trimester. Though rare, obstructed labor and difficult placental delivery may occur. In the case report we are presenting herewith, we believe that the death of the fetus happened in the early part of the second trimester.

IV. Conclusion

In conclusion, we report a case of Fetus Papyraceous with no maternal and fetal complications during pregnancy and the post-partum period. The etiology of the FP could not be explained. Routine ultrasound examination with better training and use of modern ultrasound machines with good resolution is important for detection of multiple gestations. This will allow the diagnosis of FP early in pregnancy and may prevent future obstetrical complications and reduce the risk of mortality and morbidity for the surviving fetus.

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