



TWIN PREGNANCY WITH FETUS PAPYRACEUS- A CASE REPORT

Saranya S.K* and Mirunalini S

Department of Obstetrics and Gynaecology, Rajah Muthiah Medical College Hospital Annamalai University, Chidambaram – Tamil Nadu

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ABSTRACT

The term fetus papyraceus is used to describe a mummified fetus associated with multiple gestations where one fetus dies and is flattened between the membranes of living fetus and uterine wall. Though the maternal and fetal complications in affected cases can be severe, we report a case of fetus papyraceus managed conservatively without any complications. Successful outcome is related to careful monitoring during pregnancy.

Key words:

Twin pregnancy; Intra-uterine death; Term gestation, Fetus papyraceus

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INTRODUCTION

Multiple gestations have become one of the most common high-risk conditions encountered by practicing obstetricians. Twins represent approximately 3% of all live births¹. Triplets and higher-order births, according to the Hellin-Zeleny hypothesis, have increased 470% and triplets now occur with a frequency approaching 1 in every 500 deliveries². Multiple births result in 17% of all preterm births less than 37 weeks and 26% of all very low birth- weight (<1,500 g) infants and are at an approximate 7-fold greater risk of dying before their first birthday compared with singletons².

The term fetus papyraceus is used when intrauterine fetal demise of a twin early in pregnancy occurs, with retention of the fetus for a minimum of 10 weeks resulting in mechanical compression of the small fetus such that it resembles parchment paper³. Being a rare complication, the incidence of fetus papyraceus has been reported at 1 in 12,000 pregnancy⁴, and ranges between 1:184 and 1:200 twin pregnancies⁵. We present a case report on a twin pregnancy with fetus papyraceus

Case Report

A 23-year-old primigravida presented to us in labor at 38+6 weeks gestation with abdominal pains. She had a

normal antenatal course with a history of excessive nausea and vomiting during the first trimester. Pregnancy was confirmed at 10 weeks by ultrasound which reported her pregnancy as twin gestation. Repeat sonograph at 22 weeks of gestation showed twin gestation with one viable fetus BPD- 53 mm, FL-37 mm, maturity of 22 weeks, and a non-viable fetus with absent cardiac activity with an FL-24 mm, maturity of 16 weeks; single placenta anterior in upper uterine segment; and no gross malformations in the viable fetus. She was also diagnosed with Gestational Diabetes mellitus in routine screening test. Patient was on medical nutrition therapy. Patient was lost to follow up after that. No term scan was done. Her hemoglobin was 10 g% with B Rh positive blood group.

All other investigations were normal. Her coagulation profile was normal and her blood sugars were within normal limits. Abdominal examination revealed a term size uterus with cephalic (2/5) presentation with fetal heart rate of 106/ minute with good uterine contractions. CTG showed prolonged fetal bradycardia and hence she was shifted for emergency LSCS and she delivered a male baby of 2.5 kg of APGAR of 6/10, 8/10. Placenta and membranes were delivered in toto. On careful examination of placenta, the fetus papyraceus along with its calcified placenta was found adherent to the placenta of the live twin (fig.1). It was identified as dichorionic - diamniotic placenta with a fetus papyraceus in the layers

*Corresponding author: Saranya S.K

Department of Obstetrics and Gynaecology, Rajah Muthiah Medical College Hospital Annamalai University, Chidambaram – Tamil Nadu

of placenta (fig .1). The crown rump length of this fetus papyraceus was 8 cm and weighed 100 grams(fig.2). The normal baby did not have any anomalies and is now under follow up to assess any developmental delay

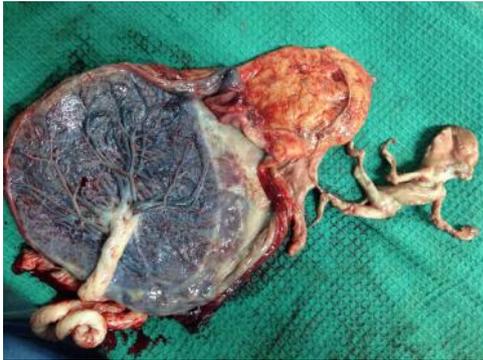


Figure 1 Healthy placenta of the surviving twins along with the fetus papyraceus and its calcified placenta



Figure 2 Fetus papyraceus with its cord

DISCUSSION

Multiple pregnancies exhibit increased complication rates such as the risk of preterm birth and increased maternal risks. They are at higher risk of specific complications which include preterm labour, IUGR, discordant twins, twin-to-twin transfusion syndrome (TTTS), fetus in fetus⁶, selective intrauterine growth restriction (IUGR), death of one twin, and twin reversed arterial perfusion (TRAP) sequence^{7,8}. In multiple pregnancies, single IUGR poses a significant risk of perinatal mortality and serious neurological impairment to the surviving co-twin more in monochorionic than dichorionic⁹. Congenital anomalies like intestinal atresia, gastroschisis, absent ear, aplasia cutis, central nervous system damage and anomalies of the heart have been reported^{10,11}. Single fetal death in a multiple pregnancy should be referred and assessed in a regional fetal medicine center¹². Close follow up is of utmost importance. Coagulation profile should be checked every 2 weeks and the surviving twin's wellbeing should be monitored closely with ultrasound and Doppler. Any anomalies in the surviving twin should be ruled out before making the decision to continue pregnancy.

Neonatal cranial ultrasound is recommended after delivery. Serious compromise in the surviving fetus may be anticipated and this should be discussed with parents¹². Fetal magnetic resonance imaging provides more detailed information about brain lesions in the surviving fetus and its use is recommended¹³. However, in many cases of

fetus papyraceus, there are no complications to the mother or to the surviving twin, as described in the case presented here. Antepartum diagnosis of fetus papyraceus is infrequent and it is usually an incidental finding during investigation of some other pregnancy problems. No correlation to maternal age, parity or gravidity with fetus papyraceus has been discovered¹⁴. Expectant management with close maternal and fetal surveillance is advised.

CONCLUSION

The primary concern of fetus papyraceus is its effect on the surviving fetus and on the mother. So, for conservative management, to avoid the possible complications, once the intrauterine diagnosis of fetus papyraceus is made, there should be close follow in the form of serial ultrasound examinations and coagulation profile for a better maternal and neonatal outcome.

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