



ORIGINAL RESEARCH PAPER

Obstetrics & Gynaecology

“CASE REPORT : FETUS PAPYRACEOUS, A RARE COMPLICATION OF TWIN PREGNANCY”

KEY WORDS:

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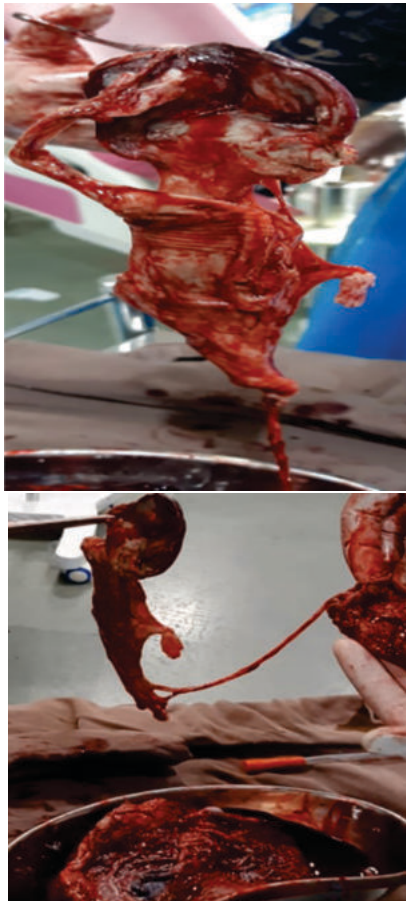
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ABSTRACT

Introduction: Fetus papyraceous or compressus is the mummified fetus associated with multiple gestation, where one fetus dies in early second trimester, flattened, mummified and compressed between the membranes of the living fetus and the uterine wall. It is more common in monozygotic twins but may occur in dizygotic variety. However, the maternal and fetal complications in affected cases can be severe. Fetus Papyraceous is a rare condition associated with obstetric complications. We report an incidental diagnosed case of fetus papyraceous following normal vaginal delivery

CASE :

25 year old unbooked patient G2P1L1 previous normal vaginal delivery came in active phase of labour at 39 weeks with vertex presentation progressed and delivered vaginally with male baby 3 kg , apgar 8,9 ,following expulsion of placenta, o/e of placenta another atrophied placenta with cord with tiny macerated papery thin fetus with head and limbs were noted ,weighing 200 gm ,her postnatal period was uneventful Searching for a Fetus Papyraceous should be a routine part of placental examination .



INTRODUCTION

Multiple gestations have become one of the common high-risk conditions encountered by the obstetricians. Twins represent approximately 3% of all live births. Term fetus papyraceous is used when intrauterine fetal death of one twin occurs early in pregnancy, with retention of dead fetus for a

minimum of 10 weeks, resulting mechanical compression of the dead fetus such that it simulates parchment paper.¹

It is very rare condition. It's incidence reports as one in 12,000 pregnancies. and between 1:184 and 1:200 in twin pregnancies.¹⁻³

Fetus Papyraceous or Fetus Compressus is the dead fetus which is mummified, flattened, compressed which remains in utero after death, it is parchment like remains of dead fetus. It is partially or completely reabsorbs, therefore termed as 'vanishing twin' also. It is dry and papery because the amniotic fluid, fluid content of dead fetal tissues gets absorbed.⁴ It is compressed and flattened between membranes of living fetus and uterine wall. It may occur in both varieties of twins, but more common in monozygotic twins.

Most of the time fetus papyraceous is an incidental finding, the complications related to fetus papyraceous depend on chorionicity, that is more in monochorionic twin as compare to dichorionic twin pregnancy.

DISCUSSION:

Fetus papyraceous is an uncommon condition seen 1 in 17,000 to 20,000 pregnancies.¹ It occurs in multiple gestation pregnancies, when the one fetus died early in 2nd trimester and the other fetus continue to grow. fetus papyraceous is tiny, mummified, and parchment-like because of the absorption of amniotic fluid, fluid content of the dead fetus and the placenta, the dead fetus is flattened and compressed between the membranes. This condition can adversely effects both the mother and the surviving twin. Diagnosis of fetus papyraceous is important to predict for future obstetric complications and to predict the risk of mortality and morbidity for the surviving fetus.^{5,6}

Fetus papyraceous can occur in both monochorionic and dichorionic twin pregnancies, but more common in monochorionic twin pregnancy. Fetus papyraceous can be diagnosed early by imaging studies like ultrasonography during ante natal care visits,^{7,8} but some patients never had an ultrasonography in her prenatal visits which may diagnosed intrapartumly

Etiology of it remains largely unknown. Velamentous cord insertion; lethal nuchal cords are some of the factors causing fetus papyraceous. Maternal age, parity or gravidity has no association with this. Maternal complication can occur in some which includes maternal infection, unexplained postpartum haemorrhage (PPH). In second and third trimester severe complications such as preterm labour,

haemorrhage, sepsis due to retention of dead fetus, consumptive coagulopathy, labour dystocia may present. These complications are more severe in monochorionic than in dichorionic twins, Maternal consumptive coagulopathy due to retention of dead fetus has more theoretical value, although there may be transient rise in fibrin degradation products with hypofibrinogenemia, risk of clinically significant maternal coagulopathy in nil, as in our case. Live fetus also can be affected in some; complications may occur are as follows: prematurity, intrauterine growth retardation, even it may lead to death, death may occur in the second trimester in most of the cases.⁸ Above mentioned complications may become severe when there is monochorionic placenta rather than dichorionic placenta.⁷ Congenital anomalies can occur due to thrombi or other clotting factors which are released from dead fetus, which embolizes to live fetus to produce vascular occlusive lesions.⁹ Multicystic encephalomalacia, a rare congenital disorder, results from severe fetal hypotension and hypoxia, occurs in 20% of surviving twin and contributes to the increased morbidity. The risk of serious cerebral impairment in the surviving twin following fetal death of one twin is about 20%.¹⁰ Prevalence of cerebral palsy in surviving twin after demise of one twin is found more than that of healthy twin pregnancy. The twin embolization syndrome is a serious complication that occurs in 25% of surviving twins after fetal demise of one twin. Twin embolization syndrome is result of events including- embolization of placental and fetal thromboplastins, or the direct embolization of necrosed fragments of the placenta of the dead fetus, or even infectious endarteritis and DIC. During labor Fetus papyraceous can leads to dystocia or even other rare obstetrical complications like obstructed labor and delay or obstruction the placental delivery when the fetus papyraceous lies transversely in the pelvis below the surviving twin. In case of monochorionic twin pregnancy, one fetal death may lead to perinatal mortality and neurological impairment risks to surviving live fetus.

The prognosis of the surviving twin is better in the dichorionic twin as compared to monochorionic twin. Neurological damage is more common in the surviving monochorionic twin, If fetus papyraceous was diagnosed during antenatal period, the living twin should be evaluated by serial ultrasonography, Doppler study and biophysical profile.

Mother should be followed up by doing serial coagulation profile and to look for development of Disseminated intravascular coagulation Ultrasonography can confirm the diagnosis but may not be possible in all cases due to its position and technical difficulties

CONCLUSION:

Even though fetus papyraceous is a rare condition, with the availability of advanced techniques like ultrasound early diagnosis of fetus papyraceous can be made in most of the cases and we can prevent severe complications associated with it. the dead fetus may be associated with minor malformations of the surviving fetus. New-born's detailed checkup and histopathological examination of the placenta is essential after delivery of fetus papyraceous and living twin Placenta and membranes should be inspected thoroughly to diagnose any placental abnormality or fetus papyraceous which may be an incidental finding as in our case

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