

# CASE REPORT

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## FETUS PAPYRACEOUS: A CASE REPORT

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**ABSTRACT:** Fetus Papyraceous is a rare manifestation of discordant growth in twins. It is usually diagnosed during labour or after delivery of papyraceous. The main complication is that the normal twin and occasionally the mother may be adversely affected.

**KEYWORDS:** Discordancy, death of 1 twin in early pregnancy, chance of complications in live twin, vascular anastomoses.

**INTRODUCTION:** In a twin pregnancy, occasionally one twin dies remote from term and the pregnancy continues with one living fetus. The dead twin may be compressed between membranes of the living fetus and the uterine wall. Thus a parchment like Fetus Papyraceous may result due to loss of fluid and soft tissue. This is more frequent in Monozygotic and Monochorionic twins. We present one case.

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- Mrs A, a 2<sup>nd</sup> gravida with a previous FTNVD came for antenatal scan-, low risk. This was her 1<sup>st</sup> visit- POG was 26wks. In the scan, a live fetus corresponded to POG but on further examination a second gestational sac could be identified and the fetus corresponded to 12 wks. Cardiac activity was absent in 2<sup>nd</sup> twin and there were no fetal movements. A presumptive diagnosis of intra uterine demise of 1 twin was made and she was asked to come for follow up
- In the follow up scan the 2<sup>nd</sup> twin had shrunk further whereas the 1<sup>st</sup> twin was doing well. In further scans the dead twin could not be made out separately with its sac. Only an ill-defined mass could be made out abutting the placenta
- Investigations including PT, PTT, Fibrinogen, Platelets and FDP were within normal limits.
- She delivered a healthy male child of 3 kg and also a shrunken parchment like fetus attached to the placenta. Mother and baby were discharged on 2<sup>nd</sup> post natal day and were lost to follow Up.

### DISCUSSION:

- Twins and higher order pregnancies are more often conceived than born. First described by STOECKEL in 1945, Fetus Papyraceous is a mummified or parchment like fetus flattened against the uterine wall due to death and resorption, with a co existent LIVE twin.<sup>(1,2,3,4,5,6)</sup>
- Also called a Paper doll fetus, Its Incidence is - 1 in 12000 live births, 1 in 184 twin pregnancies.<sup>(1)</sup> ART techniques have increased diagnosis as scans are more frequently done. It may be an outcome of a vanishing twin syndrome.
- After demise of the twin usually 10 wks elapse allowing for mummification and POG at the time of IUFD is in the 2nd trimester between 3rd and 5th month.

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- There may be Anomalies like-Intestinal Atresia, Gastroschisis, Absent ear, Aplasia Cutis, CNS defects and CVS defects.<sup>(1)</sup>
- POSTULATED MECHANISMS for intra uterine death are - Discordancy, Chromosomal anomalies, Velamentous insertion of cord, Nuchal cord, Placental insufficiency, Diabetes, HTN.<sup>(2)</sup>
- It is thought that vascular connections exist from one fetus to another.<sup>(2,3,4)</sup>
- In Monochorionicity Complications and death are more and may be due to Twin To Twin Transfusion syndrome or cord entanglement.<sup>(2,3,4)</sup>
- IUFD of single twin before 14wks POG does not endanger surviving twin but if it occurs after 14 wks, lack of blood pressure in dead fetus may lead to acute massive transfusion of blood from survivor to dead twin leading to anaemia of survivor. Thus the survivor has a high risk of Renal cortical necrosis, Cardiac and Neurological damage (Multicystic Encephalomalacia) due to ischaemia.<sup>(2,3,4)</sup>
- The Survivor has a 38% probability of death and a 46% probability of Neurological damage due to ischaemia.
- Other manifestations are - Complete reabsorption of fetus, Placental cyst (if IUFD occurs below 8 wks), Subchorionic fibrin or amorphous material, If there are associated chorioangioma of the placenta.
- There is NO ASSOCIATION with maternal age, parity or gravidity.
- A vanishing twin will not have blood flow on Doppler and HPE may show Chorionic villi.
- Placental and fetal analysis may reveal diploidy and triploidy.

**DIAGNOSIS AND PROGNOSIS:** Diagnosis is usually made during labour or after delivery of papyraceous which may cause obstruction and dystocia sometimes (due to low lying papyraceous), infection, Preterm labour, severe unexplained PPH. Antepartum diagnosis is rare.<sup>(1)</sup>

Prognosis usually excellent for both surviving twin and mother if IUFD occurs early(1<sup>st</sup> trimester) and Dichorionic twins, Mother may have spotting.<sup>(2,3)</sup>

In a later death however, chorionicity is important for the neurological prognosis of the survivor, as Monochorionicity has a poorer prognosis.<sup>(2,3,4)</sup>

Consumptive coagulopathy, Prematurity, IUGR,<sup>(2)</sup> Fetal death, (more so if 2<sup>nd</sup> twin dies after 14 wks POG) and Cerebral palsy<sup>(2,3,4)</sup> may result.

**MANAGEMENT:** Due to complications more attention has been paid to intra uterine diagnosis by serial scans to determine Chorionicity. If Sonography does not determine Chorionicity DNA studies on Amniocytes may be considered.<sup>(2)</sup>

- Some parents may opt for termination after counseling.<sup>(2)</sup>
- Clinical management depends on Gestational age, Fetal lung maturity and detection of in utero fetal compromise.Goal is to optimise outcome for survivor while avoiding prematurity.Elective delivery is not recommended before 37wks unless antenatal surveillance shows fetal compromise.<sup>(2)</sup>
- Middle Cerebral artery peak velocity of survivor twin can be measured and if the value is in a zone of severe fetal anaemia intra uterine transfusion can be planned.<sup>(3)</sup>

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- MRI is being advocated due to fear of neurological complications as it can detect ischemic areas in the surviving twin (preferably 2 – 4 wks after fetal demise).<sup>(2,3,4)</sup>
- Labour can be induced if baby is mature enough. Umbilical cord gas measurements are desirable.
- Caesarean section may be needed if necessary.
- Psychological and bereavement COUNSELING is important in addition to explaining to parents about<sup>(2,3,4)</sup>
  - 1 - Significant morbidity as a result of Prematurity.
  - 2 - Inability of C Section to prevent outcome.
  - 3 - Guarded prognosis of survivor.
- Referral to a Tertiary care Perinatal unit is advised.

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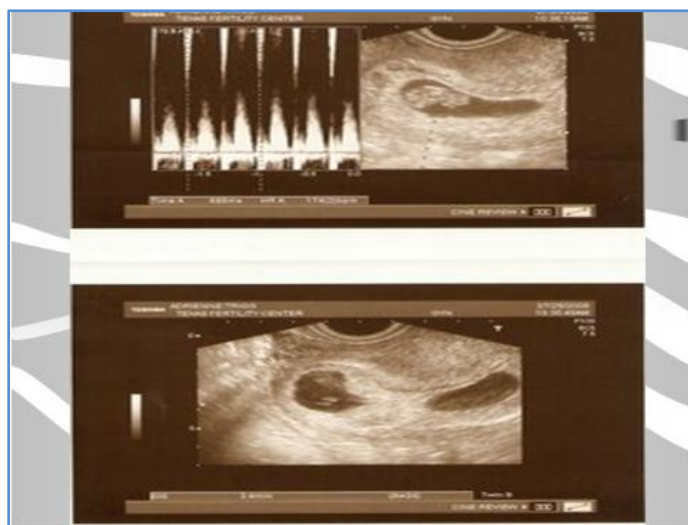


**Figure 1**



**Figure 2**

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**Figure 3**

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