

# Fetus Papyraceus: A Case Report

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## ABSTRACT

Fetus papyraceus is a rare condition, where one fetus dies during the second trimester of gestation in a case of multiple gestation. The dead fetus is flattened, mummified, and compressed between the membranes of the surviving fetus and the endometrial wall. This is frequently associated with perinatal morbidity in another twin. Ultrasonography (USG) detection is not always possible due to the anatomical position of the fetus and technical obstacles. We delineate a case of fetus papyraceus in Obstetrics and Gynecology Department in M.K.C.G. Medical College and Hospital, Berhampur, Odisha, India. A 23-year-old woman gravida, three para, two living issue one, prior normal delivery, unbooked, and vaccinated at periphery health center was admitted with complaints of labor pains and underwent normal delivery, and on inspection of placenta found a fortuitous finding of fetus papyraceus which was inside a separate sac.

**Keywords:** Case report, Fetus papyraceus, Intrauterine death, Twin pregnancy.

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## INTRODUCTION

Fetus papyraceus is the state in which if one of the fetuses dies early in a case of multiple gestation.<sup>1</sup> Its incidence is 1 in 12,000 pregnancies.<sup>2</sup> The dead fetus is mummified, compressed and flattened between the membranes of the surviving fetus and the endometrial wall. It is more common in monozygotic twins and is discovered at delivery or earlier by sonography.

When the demise of co-twin happens at initial gestational age or in the first trimester, generally the pregnancy continues with few detrimental effects on the surviving twin and the mother. But if death happens in the second or third trimester, there is an elevated risk for the surviving twin and a high probability of the mother being impacted with disseminated intravascular coagulation.<sup>3</sup>

## CASE DESCRIPTION

A 23-year-old lady G<sub>3</sub>P<sub>2</sub>L<sub>1</sub> was admitted at MKCG MCH with the complaint of pain in the abdomen. Her last menstrual period (LMP) was on 21.11.2022 and estimated date of delivery (EDD) was on 28.08.2023. She was carrying a pregnancy with a gestational age of 37 weeks and 2 days. On examination, her vitals were stable. On per abdominal examination, her uterus was 32 weeks, cephalic, fetal heart rate (FHR) – 132 bpm. On per vaginal examination, the cervix was 25% effaced, 2 cm dilated, the membrane was intact, the station was (-2) and the pelvis was adequate. Routine investigations were within normal limits. She had done one Ultrasonography (USG) on 02.03.2023 and it was a dichorionic diamniotic twin (DCDA). Fetus A was 14 weeks 3 days and fetus B was 14 weeks 2 days. She had done another USG on 04.08.2023, where fetus A was live, fetus B was an intra uterine death (IUD), and it was associated with raised PI value of B/L uterine arteries.

Vaginal delivery was conducted following augmentation with oxytocin. A live female baby (Fig. 1) was delivered followed by the expulsion of an IUD female fetus (Fig. 2), which was inside a separate sac and it was flattened and mummified. Its gestational age was corresponding to around 14 weeks and twin 1 was a low birth weight baby (wt. 2200 grams). On examining the placental

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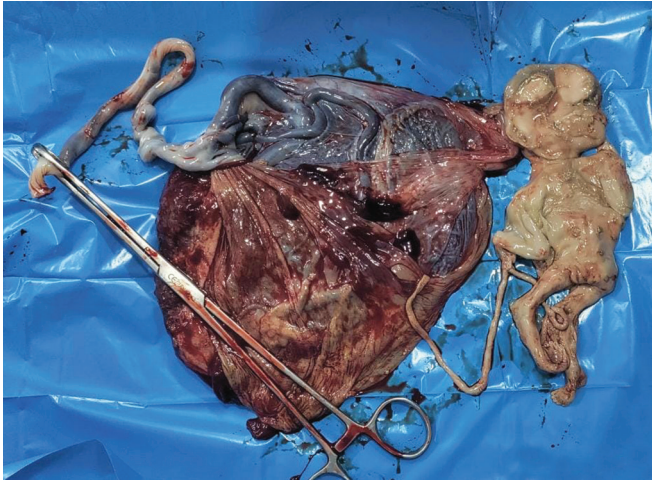
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Fig. 1: Twin one (low birth weight baby)

membranes, it was a DCDA twin with twin 2 fetus papyraceus. Intrapartum and postpartum delivery was uneventful.



**Fig. 2:** Fetus papyraceus. It was twin two which has been flattened, mummified, compressed, and attached with placenta through a flaccid streak of umbilical cord. The normal umbilical cord which has been clamped with sponge holding forceps was attached with twin one

## DISCUSSION

Fetus papyraceus only happens in multiple gestation. This is often connected with perinatal morbidity in another twin. The intrauterine fetal demise of one of the twins is likely because of twin–twin transfusion syndrome, congenital anomalies, and uteroplacental vascular insufficiency. The prognosis of one of the twins in the matter of fetal death of a co-twin relies upon several elements like gestational age at the time of fetal demise, time duration between fetal death and delivery of the living fetus, number of fetuses, and chorionicity.<sup>4</sup>

The prognosis of the living fetus is good in the dichorionic twin in comparison to the monochorionic twin. Ultrasonography detection is not always possible due to anatomical location and technical difficulties.<sup>5</sup> If fetus papyraceus was found during the prenatal check-up, the surviving fetus needs to be assessed by periodic USG, Color-Doppler ultrasound, and biophysical profile.

Mother must be advised for frequent follow-up visits by doing serial blood coagulation profiles [Bleeding time (BT), clotting time (CT), PT-INR, aPTT, etc.] and for the detection of the occurrence of consumption coagulopathy.

## CONCLUSION

Although fetus papyraceus is an uncommon state, its adverse effect on surviving twins can be minimized by early detection of fetus papyraceus through serial USG. In our case, it was an unbooked case and she was directly admitted through emergency and delivered vaginally. Twin 1 was a low birth weight baby and there was no gross congenital anomaly, and the intrapartum and postpartum period was uneventful. There should be routine placental examination as most often fetus papyraceus is an incidental discovery.

## Clinical Significance

If fetus papyraceus is diagnosed antenatally, close monitoring of surviving fetus and mother is important. Watchful monitoring can lead to a good prognosis for the surviving fetus and mother.

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