Abstract:
Fetus papyraceus also called fetus compresses, a mummified fetus as a result of fetal death during second trimester between the third and fifth month pregnancy. It is always associated with twin pregnancy, in which one fetus is alive and the death of the other fetus is not always clear. In our case the estimated gestational age at the time of fetal demise was 16 weeks for which the cause is not known.

Keyword: Fetus Papyraceus, Vanishing twin, Diamniotic dichorionic twin

INTRODUCTION
Fetus Papyraceus defined as a twin fetus that has died in utero during second trimester after reaching a size too large for complete reabsorption and has been compressed, flattened against the uterine wall by the growing fetus in to a parchment like state.

In this case, co-twin demise in adiamniotic pregnancy results in reabsorption of the amniotic fluid around the dead twin. The dead twin appears as an amorphous structure along the wall of the uterus. Provided the twins are dichorionic, the surviving twin can continue to grow unaffected. The reported incidence of fetus papyraceus is 1:12,000 live births and ranges between 1:184 and 1:200 twin pregnancies (1).

CASE STUDY
A 23 years old primi married since 1 year with regular cycles admitted for institutional delivery on 5.10.12. Her last menstrual period was 18.1.2012 and expected date of delivery 24.10.12. Past history and family history were noncontributory. General physical examination was unremarkable. On obstetrical examination height of the uterus 34 cm, abdominal circumference 117 cm, fetal tone was good and in breech presentation.
First trimester ultrasonography done outside on 5.3.12 - diamniotic dichorionic twin live intrauterine gestation corresponding to 6 weeks gestation (Fig.1). 27.3.12 - twin live intrauterine gestation corresponding to 9-10 weeks gestation (Fig.2 & 3).

Third trimester scan on 17.8.12-single live intrauterine breech 30 weeks (Fig.5), liquor adequate, placenta fundal posterior, normal growth curve (Fig.6) with evidence of dead fetus superiorly.

On admission fetal ultrasound showed twin gestation, twin A viable fetus of 37 weeks gestation in breech presentation and twin B nonviable fetus of 16 weeks gestation. Patient admitted on 5.10.12. After two days of admission patient
movements. Hence the patient taken for emergency cesarean section due to breech presentation with fetal alarm signal. Intraoperative findings are Diamniotic Dichorionic twin gestation with Twin A : Live female child 2.52 kgs.with APGAR of 6/10, 8/10 (Fig.8). Twin B : Fetus papyraceus found stuck on the fundus of the uterus, weighing 55 gms (Fig.7).

**Fig.8.** Fetus Papyraceus with term live baby
The first born was alive girl baby delivered as extended breech followed by delivery of placenta. The mummified fetus stuck to fundus of the uterus which was gray white in colour and compressed, measured in crown heel length 21 cm, weight 55 grams. The sex could not be determined. Congenital anomaly, internal organ could not be evaluated because of advanced autolysis and mummification. The size of mummified fetus corresponds to 16 weeks of gestation. It indicate the arrest of growth and subsequent blighting in the second trimester. The placenta was diamniotic dichorionic with central cord insertion. The mummified placenta weighed 100 grams and no placental anomaly seen other than small sclerotic umbilical cord measuring 15 cm in length.

**DISCUSSION**
The fetus papyraceus can occur owing to a poorly implanted placenta, velamentous insertion of cord, uterine trauma, a developmental anomaly that may cause major organs to fail or to be missing completely, or there may be a chromosomal abnormality incompatible with life. It occurs more often with monozygotic twin pregnancies versus dizygotic. No association with maternal age, parity nor gravidity has been noted.

A vanishing twin, also known as fetal resorption is a fetus in multiple gestation pregnancy which dies in utero during the first trimester and is then partially or completely reabsorbed by the twin, the phenomenon referred to as twin embolisation syndrome or vanishing twin syndrome. The incidence of twinning is of 3.29%. Of these, 21.2% the "vanishing twin" phenomenon occurs, often with associated vaginal bleeding, but with a good prognosis for the remaining fetus. (2) Pathophysiology: Abnormalities that result in the disappearance of a fetus usually appear to be present from early in development rather than occurring from an acute insult. Placental or fetal analysis frequently reveals chromosomal abnormalities. (3) These abnormalities include diploidy, triploidy, and alternate sex chromosome, results on placental pathology, skin biopsies, and chorionic villus sampling. Study findings of the viable twin chromosomes in these reports are normal.
Therefore, it is thought that the vanished twin had a chromosomal abnormality resulting in disappearance. (4)

The clinical signs very suggestive of fetus papyraceus rapid enlargement of uterus between 12 and 24 weeks gestation, followed by a normal or slowed growth period, the sudden appearance or subsidence of toxaemia of pregnancy.

In many cases of fetus papyraceus there are no complications to the mother or to the surviving twins. However complications that can occur include premature labour, infections and post partum hemorrhage. Even at the end of pregnancy a low lying fetus papyraceus may block the cervix and may require a cesarean section to deliver a living twin (5).

Complications of the surviving infants usually occur in monochorionic twins which includes prematurity, intrauterine growth retardation and even death. Congenital anomalies like intestinal atresia, gastrochisis, aplasia cutis (8), cerebral palsy (7) and anomalies of heart. These complications are attributed to thrombi or other clotting factors from the dead fetus embolising to the live twin and producing vascular occlusive lesions (6). Prognosis of surviving twin depends on gestational age at the time of demise, chorionicity and the time between demise and delivery of the surviving twin. Conclusion Eventhough fetus papyraceus is a rare condition signs and symptoms suspicious of this condition should receive more attention by serial ultrasound examinations to arrive the intrauterine diagnosis to avoid the possible maternal and fetal complications.

Reference:
1 Finaldiagnosisfetus papyracpath. upmc.edu/cases/case128.
4 Lloveras E, A female infant with a prenatal diagnosis: a vanishing twin phenomenon oct 2001;21(10):896-7
6 Pharoah PO, Cooke RW, the vanishing twins. May1997;39(5)
8 G Sutkin. new england journal of medicine. 10.1056/NEJM 020196.
9 MR Camiel jama.net work.com/article.335784.