

# Haemoperitoneum in undiagnosed fundal placenta percreta in a third trimester pregnancy presented in labor: A case report

**Nansi Dari Alfayez (1)**  
**Taghreed Mohammed Aldajeh (2)**  
**Mohammad Abed Al-rahman AL-harasis (3)**  
**Ahmad Saad Kharabsheh (2)**  
**Khalil Abdel Wahhab Al-Tamimi (2)**

(1) MD OBG senior specialist  
 (2) MD OBG junior specialist  
 (3) MD ANESTHESIA junior specialist

## Corresponding author:

Dr. Nansi Dari Alfayez  
 MD OBG senior specialist  
**Email:** nansialfayez80@hotmail.com

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## Abstract

Fundal placenta with abnormal invasion is relatively rare.

Most of fundal placenta with abnormal invasion is difficult to be diagnosed in the antenatal period, and is mostly diagnosed in the postpartum period .

Risk of uterine rupture in fundal placenta with abnormal invasion is one of the most dangerous complications which can lead to hemorrhagic shock and subsequently leads to death.

We report a 32 year old woman who presented to our obstetric emergency room; she was G2p1 by caesarian section due to fetal distress, secondary infertility of 9 years , spontaneous pregnancy, complaining of abdominal pain and with a history of vaginal spotting at 34 weeks gestation.

During caesarian section haemoperitoneum was noticed.

After exploration fundal placenta percreta with omental band adhesion attached to the placental site was found.

**Key words:** Case report, Haemoperitoneum, fundal placenta percreta,

## Introduction

Fundal placenta with abnormal invasion is invasion of placental villi into the myometrium due to defective decidua basalis (1).

Placenta percreta is considered to be a severe degree of the abnormal placentation, where the placenta invades the full thickness of the uterine wall to reach the covering serosa (2).

Little is known about the exact incidence, and risk factors. Even when the case is highly suspected, no clear guidelines exist concerning the best modality of prenatal management or timing and route of delivery (3,4,5).

Risk factors for myometrial defect are: previous scars such as cesarian section, myomectomy, dilation and curettage, perforation, advanced maternal age more than 35 years, high parity and previous Asherman syndrome and usually high levels of alpha fetoproteins.(6)

One of the most serious and dangerous complication of fundal placenta percreta is ruptured uterus which might end with significant fetal and maternal mortality.

In the antenatal clinic it is difficult to detect elements of invasion in fundal placenta.

High risk groups mentioned earlier have a high suspicion of low lying placenta (previae).

In non previae, fundal placenta with myometrial invasion is mostly diagnosed in the postpartum period after placental removal or retained placenta presented as bleeding.

Fundal placenta with invasion patients may present in signs of shock as did our patient due to bleeding from the placental site causing haemoperitoneum.

Uterine rupture in placenta with abnormal invasion is a serious and life threatening condition which needs urgent intervention and proper management.

The definite diagnosis is based on histopathological study of uterine rupture site and confirmation of the absence of the placenta basal plate and the presence of trophoblastic tissues in the myometrium and the uterine serosa (7).

## Case report

A 32 year old female patient G2p1 by caesarian section due to fetal distress, secondary infertility nine years, spontaneous pregnancy.

She is 34 weeks gestation with regular follow up in the clinic, smooth pregnancy course.

Examined during antenatal care in her last visit one week prior to presentation in the clinic .

The fetus was breech, placental site was fundal, measurement goes with 33 weeks and the liquor was adequate.

Our patient presented to our obstetric emergency room with abdominal pain and vaginal bleeding.

On examination patient looks pale and in pain.

The vital signs :  
Bp :90\60,pr:110\minute ,tem:37c.

There was generalized abdominal tenderness, rigid.

Bed side ultrasound showed fetus was breech, viable, placenta fundal, measurement went with 34 weeks gestation .

Two intravenous lines were secured.

Blood samples (CBC, PT, INR, kidney function test) taken and sent for laboratory test.

Intravenous fluids started.

Foleys catheter inserted.

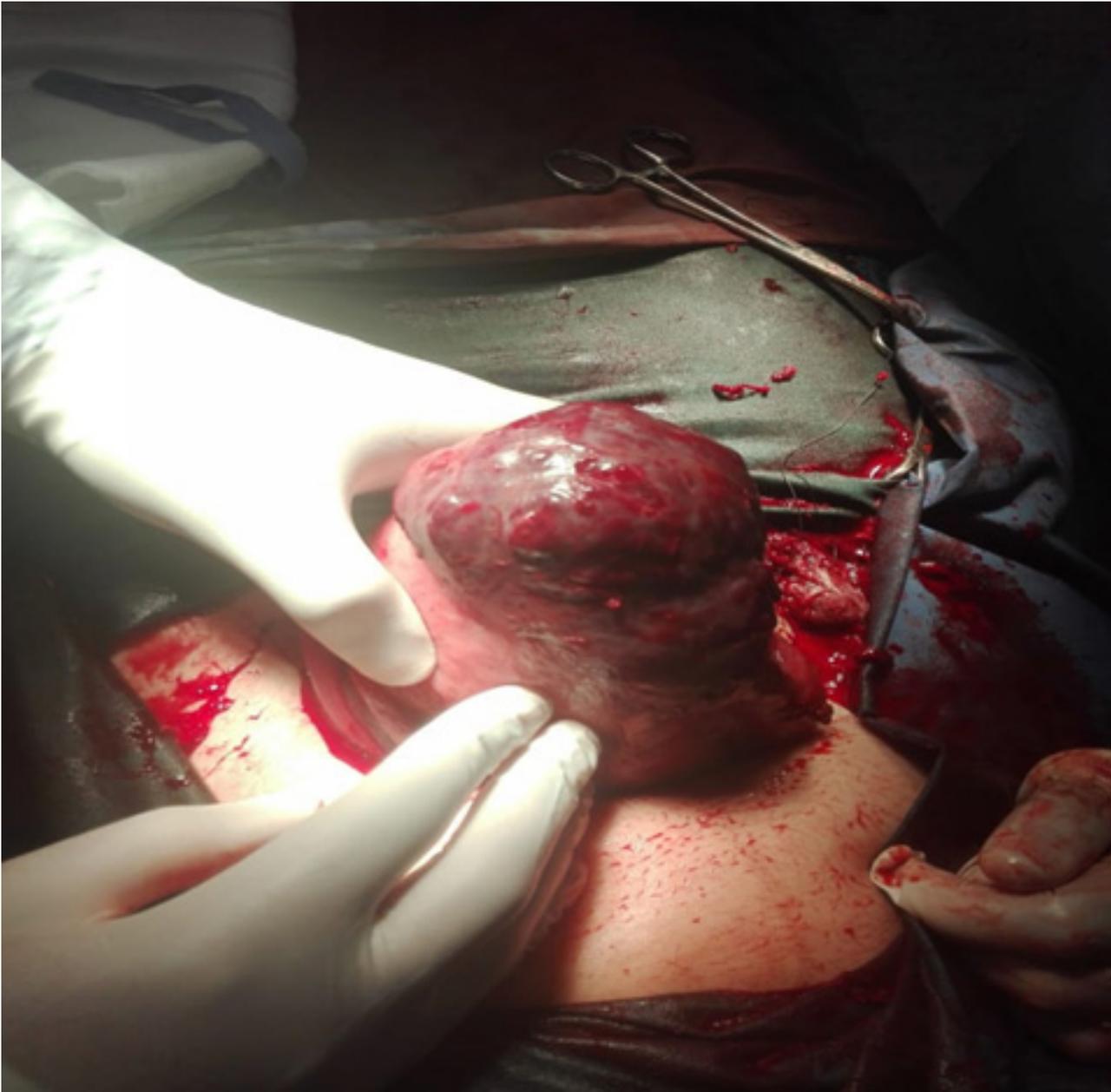
Lab test was :  
Hb : 8g\dl., plt : 220, wbcs: 8000.  
Creatinine :6.

After rapid assessment we took a decision for urgent caesarian section.

Packed red blood cells and fresh frozen plasma was prepared. During caesarian section abdominal wall opened in layers smoothly, when peritoneum was incised, the peritoneal cavity was full of blood, around 1000cc blood suctioned and clots removed.

Intra operation we noticed a 5-6cm of placenta protruding from the fundus extended through the serosa and had omental band adherent on placental site seen in Picture 1.

Omental band was ligated and cut by ligasure.

**Picture 1:**

The uterus was opened in lower uterine segment transverse incision.

Delivered male alive, breech extraction, Apgar score 8\10, fetal weight 1800gm .

Placenta percreta protruding from the fundus with omental band adherent to the site of placenta.

There was active bleeding from the placental site fundally which was adherent to the myometrium, invading the serosa and protruding as a vascular mass measuring around 5-6 cm, ruptured, causing hemoperitoneum.

**Vital signs:**

Bp: 60\30, pr: 140\minute .

Decision of hysterectomy to secure hemostasis and life saving for our patient.

The uterus was sent for histopathology (as seen in picture 2).

**Picture 2:**

Patient received seven units of packed red blood cells, seven units of fresh frozen plazma.

Haemostasis secured .

One drain in the abdomen inserted.

Abdominal walls closed in layers.

**Vital signs :**

Bp: 120\80, pr: 90\minute.

Urine output was 400cc during the time of surgery which took one hour duration.

Anesthetic recovery was smooth.

Patient then sent to intensive care unit for close monitoring.

On second day of the operation the patient was transferred to the ward.

The drain was removed in the second day of the operation.

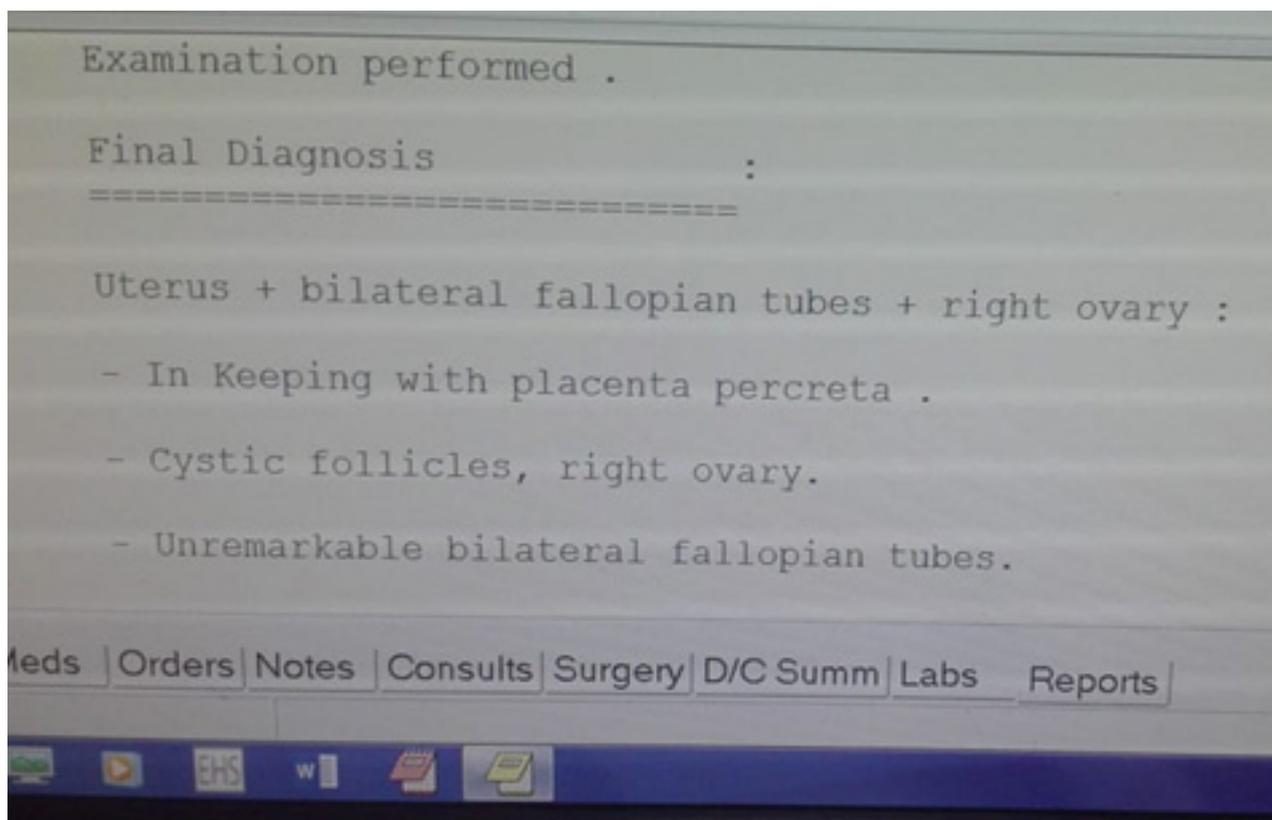
On the fourth day of the operation she was discharged in a good general condition.

Her lab test :

Hb: 11, plts: 187.pt :17, inr : 1.2, creatinine: 8.

Her baby was discharged one week later.

Histopathology result confirmed the diagnosis of placenta percreta as seen in Picture 3.



Picture 3

## Discussion

Placenta percreta is rare but is a severe type with major and catastrophic complications.

Placenta accreta occurs approximately in 1 out of 7,000 pregnancies (7). About 75%-80% are placenta accreta, 17% are increta and the remaining are percreta (1%) (8). The abnormal invasion of trophoblast to the myometrium is due to an absence or deficiency of Nitabuchs layer or the spongy layer of the decidua (2).

As we mentioned before, little is known about risk factors of fundal placenta percreta but some risk factors such as advanced maternal age (more than 35 years), previous placenta previae, previous uterine injury, previous caesarean section, myomectomy, manual removal of placenta, hysteroscopy, termination of pregnancy, endometritis, repetitive abortions and uterine malformations( 9) can be recognized as risk factors.

Unfortunately most of fundal placenta percreta are not diagnosed prenatally and encountered in the postpartum period as retained placenta and hemorrhage at attempts of manual removal (10).

## Conclusion

Fundal placenta with abnormal invasion is rarely diagnosed antenatally.

Most of them are diagnosed in the postpartum period.

They carry risk of haemorrhage and are life threatening.

Little is known about the exact incidence or risk factors.

## References

1. Tantbirojn P, Crum CP, Parast MM. (2008). Pathophysiology of placenta creta: the role of decidua and extra villous trophoblast . *placenta* 29:639-645.
2. Benirschke K ,Kaufmann P. Pathology of the human placenta 4th edition. New York : Springer 2000.
3. Belfort MA. (2010). Placenta accreta. *Am j obstet gynecol* 26:89-96.
4. (2012). Committee opinion no, 529: Placenta accreta. *Obst gynecol* 120:207-211.
5. Jauniaux E, Bhide A, Kennedy A, Woodward P, Hubinont C, et al .(2018) FIGO consensus guidelines on placenta accreta spectrum disorders : prenatal diagnosis and screening. *Int j gynecol obstet* 140:274-280.
6. *International Journal of scientific research* (2017 ), fundal placenta percreta with uterine rupture, a case study. Volume :6, December 2017.
7. Hornemann A , Bohlmann MK, Diedrich K, Kavallaris A, Kehl S, Kelling K, et al. Spontaneous uterine rupture at the 21st week of gestation caused by placenta percreta. *Arch gynecol obstet* (2011)284(4):875-8.
8. Binkowska M, Ciebiera M, Jakiel G, Placenta accreta : review and 3 case report .*Ginekol pol* (2015)86(5):396-400.
9. Suwannarurk Kpongrojapaw D, Manusook S,SuthiwartnarueputW,BhamarapratanaK. Spontaneous uterine rupture at non cesarean section scar site with placenta percreta in the second trimester. A case report .*j Med Assoc Thai* (2014 )97(suppl8):s208 –s212.
10. *International journal of womens health and wellness*. Fundal placenta percreta presenting as acute abdomen : A case report and the role of CTscan in management .Mohamad k Ramadan .DOL:10.23937\2474-1353\1510108.