

## An Unusual Case of Fundal Placenta Percreta presenting as haemoperitoneum



### Medical Science

**KEYWORDS :** Fundal morbidly adherent placenta, haemoperitoneum, obstetric hysterectomy, placenta percreta.

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### ABSTRACT

*Morbid adherence of the placenta to the uterine wall is a potentially life threatening obstetric complication that requires interventions such as caesarean hysterectomy and high volume blood transfusion. Here we report a case of second gravida with 8 months amenorrhea with previous caesarean delivery, who presented with acute abdomen with regular fetal heart rate. Ultrasound was suggestive of fundal location of placenta with findings of myometrial invasion with presence of moderate free fluid in abdomen. On emergency laparotomy there was haemoperitoneum and previous uterine scar was intact. Lower segment caesarean section was performed. After exteriorizing uterus, fundal vascular placenta with myometrial thinning with rupture of uterus at the fundus was seen. Subtotal Obstetric hysterectomy was performed with placenta in situ. In cases of normally situated placenta presenting with acute abdomen, with no obvious predisposing factor, high index of suspicion is required for the early diagnosis and management of fundal placenta percreta causing haemoperitoneum.*

### Introduction:

Placenta percreta is a rare complication of pregnancy and is potentially life threatening for both mother and fetus mainly as a result of severe bleeding, uterine rupture and infections. This life threatening condition requires urgent multidisciplinary approach as maternal mortality with placenta percreta due to hemorrhage can be as high as upto 10% (Ansar, Rauf, Bano & Liaquat, 2009). It is characterized by partial or total absence of decidua basalis and incomplete development of Nitabuch's layer. Correlations of morbidly adherent placenta have been suggested with placenta praevia, previous caesarean section, previous history of curettage, multiparity (6 or more), advanced maternal age, manual removal of the placenta, and myomectomy (Khandekar, 2014). The increasing incidence of placenta accreta may be associated with the increased rate of caesarean deliveries.

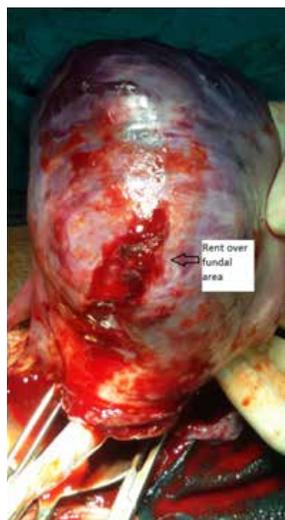
Placenta accreta is usually diagnosed with use of ultrasonography or MRI, in patients with history of predisposing factors. However, in cases with no obvious attributable factors and a normally situated placenta, high index of suspicion can lead to early diagnosis and emergent interventions.

### Case Report:

Twenty five years old unregistered second gravida with 8 months amenorrhea with history of previous one caesarean delivery 6 years back, came with complaints of acute abdominal pain. There was no bleeding per-vaginum. On examination patient was haemodynamically stable. There was diffuse abdominal tenderness, with slight distension. Clinically uterus was 32 weeks with cephalic presentation with regular fetal heart rate. On per-vaginum examination cervical os was closed. Ultrasonography showed uniform contour of the uterus with live intrauterine fetus of 31 weeks gestation with fundal placenta showing loss of retroplacental hypochoecic zone with myometrial thinning and increased vascularity, along with moderate free fluid in abdominal cavity with internal echoes. Emergency exploratory laparotomy was performed.

Intraoperatively there was 300cc of haemoperitoneum. Previous uterine caesarean section scar was found to be intact. Lower segment caesarean section was performed and male child of 1400 gm was delivered. The baby was admitted to NICU. On exteriorizing uterus, a fundal placenta with increased vascularity and thinned out myometrium was seen suggestive of myometrial

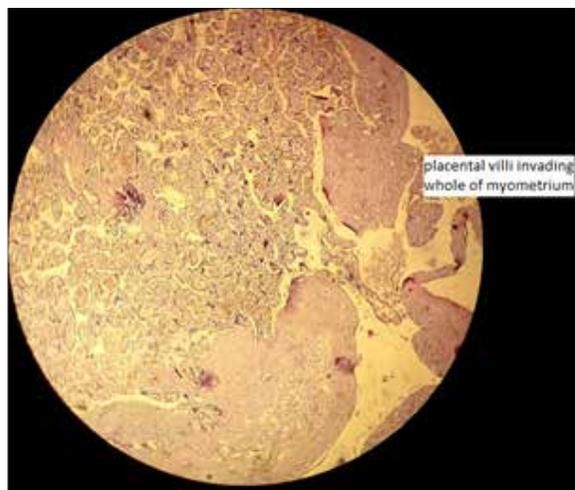
invasion of placenta. A small rent of about 2cm x 1 cm was seen over the uterine serosa with continuous trickle of blood. With fundal placenta percreta as diagnosis, subtotal obstetric hysterectomy was performed with placenta in situ. Patient received 3 units of blood transfusion perioperatively along with broad spectrum antibiotic cover. Postoperative stay was uneventful and patient went home with healthy baby. Histopathology examination showed complete myometrial invasion by placental villi, and confirmed the diagnosis of placenta percreta. (figure 1 & 2 about here)



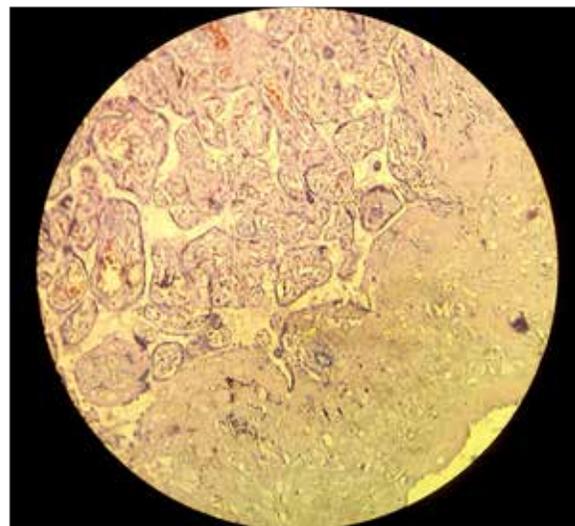
**Figure 1: Rent over fundal serosa**



**Figure 2: Fundal implanted vascular placenta with thinned out uterine musculature**



**Figure 3.HPE showing Placental villi invading whole of myometrium**



**Figure 4.Histopathological picture.**

#### Discussion:

Placenta percreta is the most extreme form of adherent placenta, causing serious life-threatening complications to both mother and fetus. Incidence of placenta accreta, increta and percreta varies between 1 in 540 and 1 in 93000 with an average of 1 in 700 (Pal, Prasad & Jain, 2014). Predisposing factors causing morbidly adherent placenta include placenta praevia, advanced maternal age, prior uterine scars caused by uterine curettage, myomectomy, Ashermann's syndrome, iatrogenic uterine perforation and manual removal of the placenta (Pal et al.2014). Recently,

incidence of placenta accreta is on the rise in modern obstetrics, due to increased number of caesarean section and advanced maternal age (Neyazi, 2013). In vitro fertilization has also been associated with abnormal placentation (Dahiya, Nayar, Gulati & Dahiya, 2012). In the present case other than history of previous caesarean delivery no predisposing factor could be elicited that would cause morbid adherence of placenta.

In literature few cases of spontaneous uterine rupture as a result of placenta percreta during early pregnancy have been reported (Vyshka, Capari & Shaqiri, 2010). Hence an early diagnosis is imperative as spontaneous rupture of the uterus due to placenta percreta is one of the most urgent obstetrical complications resulting in rapid exsanguination and severe maternal and fetal, morbidity and mortality. The present case presented with acute pain in abdomen, not associated with per-vaginal bleeding. The patient was haemodynamically stable with regular fetal heart rate. The ultrasonography helped clinch the diagnosis of haemoperitoneum and make urgent decision for intervention.

Morbidly adherent placenta can be diagnosed with gray-scale ultrasonography with sensitivity of 77-87% and specificity 96-98%, where normal hypoechoic retroplacental myometrial zone is either reduced or lost associated with myometrial thinning (The American College of Obstetricians and Gynecologists, Committee opinion Number 529, July 2012). Colour Doppler will show increased vascular turbulence. The contrasted study by MRI has allowed the correct radiological differentiation between placenta accreta and percreta. Haemoperitoneum and uterine rupture caused by placenta percreta usually require obstetric hysterectomy with placenta in situ. Methotrexate has also been described as an adjuvant therapy for the conservative management of placenta accreta. However, there is controversy regarding effectiveness of methotrexate as an adjuvant treatment. Also, there is a lack of consensus regarding optimal dosing, frequency, or route of administration (Hunt, 2010). Transarterial uterine artery embolization (TAE) is also known to be an effective method for conservative management of placenta accreta. However, it had some disadvantages, including postpartum infection and even sepsis, delayed postpartum hemorrhage, treatment failure, long term physical and psychological stress for both the patients and attending physicians (Liao & Ding, 2009).

#### Conclusion:

In cases of normally situated placenta presenting with acute abdomen, with no obvious predisposing factor, high index of suspicion is required for the early diagnosis and management of fundal placenta percreta causing haemoperitoneum. Radiological imaging techniques of Ultrasonography and MRI play pivotal role in early diagnosis of morbidly adherent placenta. Emergency Caesarean hysterectomy with placenta in situ, with adequate blood replacement can prevent maternal morbidity and mortality in such cases.

## REFERENCE

1. Ansar A , Rauf N, Bano K & Liaquat N. (2009). Spontaneous Rupture of Primigravid Uterus Due to Morbidly Adherent Placenta J Coll Physicians Surg Pak, Vol. 19 (11): 732-733. doi:11.2009/JCPSP732733 | 2. Dahiya P, Nayar K.D., Gulati A.J.S. & Dahiya, K.(2012) Placenta Accreta Causing Uterine Rupture in Second Trimester of Pregnancy after In Vitro Fertilization: A Case Report. Journal of Reproduction and Infertility, 13: 61-63. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3719369/> | 3. Hunt J.C. (2010) "Conservative Management of Placenta Accreta in a Multiparous Woman," Journal of Pregnancy, vol. 2010, Article ID 329618, 5 pages. doi:10.1155/2010/329618 | 4. Khandaker S. ( 2014 ). An undiagnosed case of placenta percreta presenting as a massive hemoperitoneum in obstetric emergency. Proceedings in Obstetrics and Gynecology, 4(1): 1-5. Retrieved from <http://ir.uiowa.edu/cgi/viewcontent.cgi?article=1218&context=pog> | 5. Liao CHY& Ding DCH.(2009) Failure of conservative treatment for placenta increta. Taiwan J Obstet Gynecol, 48:302-304. doi: 10.1016/S1028-4559(09)60310-7 | 6. Neyazi S.M. (2013) Placenta Percreta and Uterine Rupture at 16 weeks. Saudi Medical Journal, 34:753-756. Retrieved from <http://www.smj.org.sa/index.php/smj/article/download/1335/650> | 7. Pal R., Prasad D. & Jain S.( 2014 )Placenta Percreta Causing Rupture of Uterus in Second Trimester of Pregnancy in Non Scarred Uterus with an Unusual Presentation: A Case Report and Review of Literature. Open Journal of Obstetrics and Gynecology, 4: 695-698. doi: 10.4236/ojog.2014.411096 | 8. The American College of Obstetricians and Gynecologists, Committee opinion Number 529, July 2012, Reaffirmed 2014. Retrieved from <http://www.acog.org/-/media/Committee-Opinions/Committee-on-Obstetric-Practice/co529.pdf?dmc=1&ts=20150403T1044594777> | 9. VyshkaG., Capari N. & Shaqiri E. (2010). Placenta increta causing hemoperitoneum in the 26th week of pregnancy; a case report. Journal of Medical Case Reports, 4:412. doi:10.1186/1752-1947-4-412 |