Abstract: Uterine rupture due to Placenta Percreta is very rare with the incidence of 1 in 533 pregnancies (4). Placenta accreta is a placental implantation that results in an abnormal firm adherence of the placenta to the uterine wall. In Placenta increta placenta invades into the uterine musculature. The most severe form of accreta is placenta percreta. In placenta percreta, penetration of the trophoblast through the myometrium, into the uterine serosa and also through the adjacent organs (Bladder and rectum). Placenta accreta is considered as a severe pregnancy complication that may be associated with massive and potentially life-threatening intrapartum and postpartum hemorrhage (2). Maternal mortality with Placenta Accreta has been reported to be as high as 7 percentage (7). As many as 90 of patients with placenta percreta requires Blood transfusion and 40 require more than 10 units of blood transfusion.

Keyword: placenta percreta, uterine rupture, subtotal hysterectomy

INTRODUCTION:
Placenta percreta is an obstetric emergency which is often associated with massive hemorrhage and emergency hysterectomy. Studies suggest that antenatal diagnosis may reduce obstetric hemorrhage-related morbidity. We present a case report of a patient with placenta percreta presented with uterine rupture. We present this case for its rarity and preoperative diagnosis which helps in early diagnosis and management.

CASE HISTORY
27 yrs old G3P2L1 with previous two LSCS with GA 36 WKS admitted in labour ward casualty on 09/02/2013 at 8pm with complaints of bleeding per vaginum for 2 hours. No complaints of pain abdomen. She was booked and immunized and her antenatal period was uneventful. She had 2 prior caesarean sections with 1 live child. Last child birth 2 yrs back. on admission her general condition was fair. vitals were stable. On per abdomen examination uterus corresponds to 38 wks, uterine contour intact. Fetal heart rate was good. Bleeding p/v present on local examination. per vaginal examination not done suspecting placenta previa.

Previous ultrasound reports was corresponding to gestational age. On admission ultrasound showed Single Live Intrauterine fetus with cephalic presentation with Gestational age 35wks 5 days, plaenca was ANTERIOR Type1 placenta previa. Myometrium thinned out at placental bladder interface with multiple lakes to Rule out placenta percreta.

MRI: SAGITTAL VIEW
Placenta seen in anterior wall of uterus with multiple vascular channels. The placental margin and uterine wall hypointensity not well differentiated. Placental bladder interface not made out. Placenta percreta to be considered. Placenta protudes through the bladder Diagnosis of placenta percreta with type 1 anterior placenta previa was made. Patient kept in antenatal ward under careful observation prepared for planned Elective lscs on 17/02/2013 (37 weeks + 1 day). Patient developed lower abdominal pain on 15/02/2013 (36 weeks + 6 days) at 8am, associated with difficulty in micturition and painful fetal movements. Patient immediately shifted to labour ward. During transferring to labourward Patient had severe abdominal pain. on per abdomen examination uterine contour was not intact, suprapubic bulge was seen, fetal parts felt superficially, fetal heart rate was 90/minute. In strong suspicion of Rupture uterus, Patient IMMEDIATELY taken for emergency laparotomy. Senior Obstetrician, Urologist, Neonatologist called over. Blood and Blood products arranged, patient shifted directly to emergency theatre within 10 minutes.

INTRAOPERATIVE MANAGEMENT:
Fetus was found partially outside the uterine cavity with Haemo peritoneum of about 2 litres. Delivered a live term baby 2.5kg apgar 1’2/10 5’5/10 10’7/10, not cried at birth, cried after resuscitation by paediatric team. Placenta was very adherent and found to perforate the anterior wall of lower uterine segment.
and adherent to the posterior surface of bladder. Irregular rent was seen on the bladder after partially separating the placenta. Hence proceeded with subtotal hysterectomy. Bladder repair done by urologist. Suprapubic catheter placed in situ.

**posterior cut section of uterus**

On the day of surgery 4 whole blood, 2 packed cell, 4 fresh frozen plasma transfused. patient recovered well. Her renal and liver function test were normal since admission. coagulation profile done – within normal limits. Postoperative period uneventful. Baby treated with antibiotics and recovered well. Discharged on 20th postoperative day with a healthy baby.

**DISCUSSION:**

Placenta percreta is a potentially life-threatening obstetric condition that requires a multidisciplinary approach to management. The incidence of placenta percreta has increased, and seems to parallel the increasing cesarean delivery rate. The management is usually an elective cesarean delivery and hysterectomy.

**Adherent placenta is of 3 types:**

Placenta Accreta constitutes about 75-78%, in which the placenta adherent to the myometrium but does not penetrate. Placenta Increta constitutes about 20%, in which the placenta adherent and penetrates the myometrium. Placenta percreta constitute about 5-6%, in which the placenta perforates the uterus, which can also invade bladder and rectum. In placenta percreta, the decidua basalis is partially or completely absent, and the chorionic villi invade the entire myometrium up to the serosa. Risk factors are 1. Age >35, 2. Associated placenta previa (30%), 3. Scar in the uterus either by prior caesarean section/prior uterine surgery-myomectomy (1-5%), 4. Prior dilatation and curette (6). The risk of placenta percreta in future deliveries after caesarean section is 0.4-0.8%.

Rupture of placental perfusion occurs in 25% to 50% of patients. In patients with placenta previa and multiple caesarean sections, the risk is 60-65%. In 2002, ACOG estimated that incidence has increased 10-fold over past 50 years. The value of making the diagnosis of placenta percreta before delivery allows multidisciplinary planning in an attempt to minimize the maternal and neonatal morbidity and mortality. The diagnosis is usually established by ultrasonography and magnetic resonance imaging (MRI). A normal placental attachment site is characterized by a hypoechoic boundary between the placenta and the bladder. The ultrasonic features suggestive of placenta percreta include multiple placent al lacunae (vascular spaces) within the placenta, thinning of the myometrium overlying the placenta, loss of the retroplacental “clear space,” protrusion of the placenta into the bladder, increased vascularity of the uterine serosa–bladder interface, and turbulent blood flow through the lacunae on Doppler ultrasonography [3].

The presence and increasing number of lacunae within the placenta at 15–20 weeks of gestation has been shown to be the most predictive ultrasonographic sign of placenta percreta, with a sensitivity of 75% and a positive predictive value of 92% [5]. Abnormal placentation has over taken uterine atony as the main cause for emergency cesarean hysterectomy (38%). The timing of delivery in cases of suspected placenta percreta must be individualized. This decision should be made jointly with the patient, obstetrician, and neonatologist. Patient counseling should include discussion of the potential need for hysterectomy, the risk of profuse hemorrhage, and possible maternal death. A guiding principle in management is to achieve a planned delivery because data suggest greater blood loss and complications in emergency cesarean hysterectomy versus planned cesarean hysterectomy. The safest treatment is a planned cesarean section and hysterectomy if placenta percreta is diagnosed antenatally at 35-36 wks of gestation.

**CONCLUSION**

Placenta percreta is a rare presentation with a difficult initial diagnosis. We suggest that ultrasonography Should be carried out carefully in all high risk patients to rule out placenta percreta. Early diagnosis enables a thorough discussion of the procedures and planning for elective delivery to prevent both maternal and perinatal mortality.

**REFERENCES**


