

CASE REPORT

PROF-1596

PLACENTA PERCRETA WITH HAEMATURIA; A LIFE THREATENING RARITY

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Article Citation:

Ara S. Placenta percreta with haematuria; a life threatening rarity. Professional Med J Mar 2010;17(1):164-167

ABSTRACT... Placenta percreta with urinary bladder invasion is a rare but potentially lethal condition with a high mortality rate. A 28 years old woman, gravida three para two with previous 2 cesarean deliveries, at 30 weeks of gestation, was admitted with frank haematuria. The diagnosis of placenta percreta with involvement of urinary bladder was confirmed. An emergency cesarean section and obstetric hysterectomy was performed and urinary bladder was repaired.

Key words: Placenta previa, placenta percreta, urinary bladder, haematuria.

INTRODUCTION

There is well known association between caesarian section, placenta previa and abnormal placentation like accreta, increta and percreta. Predisposing factors are prior cervical D & C, previous uterine scars such as those after myomectomy and caesarian section, endometritis and sub mucous fibroids¹. Involvement of bladder with placenta percreta is a rare occurrence but lethal for mother and fetus. After the review of literature, management strategy of such cases varies from conservative management to radical approach depending upon placental invasion, intraoperative hemorrhage and expertise of surgeon.

CASE REPORT

Mrs. Som, 28 years, gravida 03 para two at 30 weeks gestation, having previous two cesarean sections, booked at a private clinic, presented with gross haematuria and incontinence of urine. There was no history of foul smelling discharge, bleeding per vaginum, fever or abdominal pain. Her previous cesarean sections were done for fetal distress and failure to progress of labour. She was severely pale with blood pressure 100/70 mmHg. Pulse 90/min, abdomen soft with slight

tenderness in supra pubic region. Uterus corresponded to 30 weeks gestation with normal fetal heart rate. The fetus was found to be lying obliquely with adequate liquor. Laboratory investigations revealed Hb. 6.8 gm %.Urine showed numerous RBC and bacteria. Ultrasonography confirmed a live fetus with adequate liquor and anteriorly sited major degree placenta previa. Doppler studies highlighted vessels invading utero-vesical interface thus confirming placenta percreta.5 units of blood were transfused and conservative management was decided to prolong the pregnancy as long as possible. After consultation with urologist, urinary bladder irrigation was done and she was prepared for cystoscopy.

Meanwhile next morning at 5 a.m. she developed sudden profuse vaginal bleeding.

Article received on: 29/12/2009
Accepted for Publication: 15/01/2010
Received after proof reading: 16/01/2010
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She became haemodynamically unstable with pulse 128/min, B.P. 80/50. She was shifted to labour ward. Three units of blood were already arranged. Blood transfusion was started and emergency cesarean section under general anesthesia was done. A live male baby weighing 2 Kg with Apgar score 2/10 was delivered as breech. Placenta was found to be penetrating the myometrium of lower uterine segment and reaching the serosal surface of the uterus. A mass of 3x3cm was found to be going into base of urinary bladder from midline of the uterus.

Emergency total hysterectomy was done to avoid torrential haemorrhage. Urinary bladder was found to be open at two places. It was repaired. Abdomen was closed. Patient remained well in the immediate post operative period. Bladder irrigation was carried out for 48 hours. After 72 hours patient developed sudden oliguria and abdominal distention. At that time bowel sounds were normal. On ultrasound examination free fluid in peritoneal cavity was seen. Dehiscence of bladder scar was suspected. Emergency laparotomy was done. Urologist was called for help. Four liters of urinary fluid were drained. The urinary bladder had 4cm rent in the dome & contained 400-500 ml clots. The rent was extended, clots removed and bladder was repaired with vicryl. Suprapubic 3-way catheter for bladder irrigation was inserted. This catheter was removed after one week. Meanwhile Inj. Methotrexate was given. Her β -HCG dropped to 285 Units on fifteenth post op day. She was discharged after two weeks.

DISCUSSION

The risk of placenta previa and its abnormalities like accreta, increta and percreta increases with previous caesarian deliveries. Other predisposing factors are prior cervical D & C, previous uterine scars after myomectomy, endometritis and sub mucous fibroids¹. Due to previous uterine trauma and damage, there is an absent or inadequate formation of deciduas during pregnancy, which in turn promote trophoblastic infiltration in to the myometrium resulting in increased frequency of placenta accreta, (moribund adhesion with myometrium) increta (penetration in to the myometrium) and percreta (appearance of placental tissue over serosal

surface). Incidence varies between one in 1540 and 93000, average incidence is 1 in 7000 pregnancies^{2,3}. The Incidence of all forms of Placental adhesions (accreta, increta, percreta) has been increasing for the last two decades the reason being increasing caesarean section rate. Placenta percreta involving bladder is rare life threatening condition and 30 cases have been reported in literature⁴. This case was diagnosed prior to hospital admission as a case of placenta previa which after repeat ultrasound revealed anteriorly sited major degree placenta previa percreta with extremely thin uterine segment along with vessels penetrating between uterus and the bladder.

Placenta percreta involving bladder is a rare but catastrophic condition which usually is missed in the antenatal period. Its optimal management relies on accurate early diagnosis by sonography, doppler studies and MRI (if facility permits) The sonographic criteria for diagnosis is absence of hypo-dense retro-placental myometric zone, reduced or absent surface between uterine serosa and bladder, presence of focal exophytic tissue^{4,5}. Color doppler increases diagnostic sensitivity of sonography in abnormal placental implantation^{5,6}. Abdominal doppler confirms Placenta percreta by highlighting newly formed vessel between uterus and the bladder⁷.

Placenta percreta is potentially lethal condition for both mother and fetus. So such cases need to be done on elective operative list with multi disciplinary team involving experienced gynecologist and anesthetist, urologist and sometimes vascular surgeon in order to avoid massive hemorrhage. Such multi disciplinary approach could not be carried out in our case as it was an acute emergency early in the morning and it was not possible to get the concerned team.

Patients lose an average of 3,000 - 5,000 cc of blood in these surgeries; it may necessitate massive blood transfusion to ensure that adequate stores of blood will be available⁸.

A total of 11 units of blood were transfused in our case during her stay in the hospital. Ample amount of blood

reserve is a must to avoid maternal mortality and morbidity which can further be reduced if obstetric hysterectomy is done quickly and as a primary approach which usually is done in 93% of cases^{9,10}. Conservative management or non surgical management is desirable to avoid torrential hemorrhage if placenta has involved adjacent structures such as bowel and urinary bladder or considered in women where fertility is needed to be preserved. Methotrexate may have an important role in the conservative management of placenta percreta with bladder invasion and it has been used in many patients^{9,10,11}. Ting-Kai Leung et al¹² tried prophylactic trans-uterine embolization to reduce intraoperative blood loss for placenta percreta invading the urinary bladder. The success rate of uterine artery embolization for postpartum bleeding appears to be lower with abnormal placentation. However, it may allow a safe waiting interval for spontaneous migration of the placenta as concluded by Gerome Descarguesa et al¹³ in their case report. Maternal mortality is 7-10% of reported cases^{9,10,11,12}. We decrease mortality and morbidity by combined approach of taking early and quick decision of hysterectomy and leaving in situ small portion of placenta adherent with base of bladder. For which 500 microgram injection of Methotrexate was given in post operative period. This was a safe approach for managing placenta percreta invading the bladder, which might reduce blood loss and preserve an intact bladder in spite of two openings in bladder.

Patient was discharged in satisfactory condition and followed up for one year without any complication.

CONCLUSIONS

Clinician and general practitioner must be familiar with this rare obstetric complication of pregnancy. Furthermore obstetrician must utilize all available methods to accurately diagnose abnormal placental adhesions in pregnant women with a history of cesarean delivery and placenta previa. Early diagnosis, close monitoring adequate planning, and prompt surgical technique will help to reduce maternal mortality and morbidity related to this catastrophic condition.

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