

Placenta Percreta: A Case Report

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I. Introduction

Morbidly adherent placenta is a clinical condition when part of placenta or entire placenta invades and is inseparable from uterine wall. There are three main entities (accreta, increta, and percreta), which are defined by histological degree of placental invasion into the myometrium [1]. Placenta percreta is a rare pregnancy disorder in which the placenta penetrates the uterine myometrium and can invade surrounding organs.

Incidence of morbidly adherent placenta is rising and is mostly seen in pregnancy with multiple prior cesarean deliveries. Risk factors are mainly previous cesarean sections, dilatation and curettage for miscarriage, pregnancy following endoscopic surgery for ashermans syndrome and myomectomy. It is a very serious complication of pregnancy that can be life-threatening for both mother and fetus. It is frequently associated with severe obstetric hemorrhage, usually necessitating hysterectomy. The average blood loss at delivery is 3000-5000 ml [2]. Maternal mortality with morbidly adherent placenta has been reported to be as high as 7% [3].

II. Case Report

- A 30 year old G6P5L5 at 37 weeks of gestation was admitted for safe institutional delivery. She was referred to our hospital at 35 weeks gestation in view of low lying placenta covering internal os. She had first three full term normal vaginal deliveries followed by 2 cesarean sections. Her last section was done 3 years back. She had no any past medical history. She is non-diabetic and non-hypertensive in this pregnancy. Her ultrasonography at 35 wks showed low lying placenta covering internal os. Immediately when she came to our hospital, doppler was done at 35 wks which revealed placenta accreta with multiple tortuous vascular channels under placenta. She was posted for elective LSCS at 37 wks after making necessary arrangements. Abdomen was opened through previous transverse scar under spinal anaesthesia. Intra-operatively there are multiple large vessels over the lower uterine segment and placenta was seen bulging through the lower uterine segment and only thin peritoneum was covering it. Transverse uterine incision was given above the placental bulge and a live female baby with good APGAR was delivered out by vertex presentation.

- There was profuse bleeding from placenta and uterine surface. Also there was profuse bleeding from the superior surface of the bladder. Placenta and bladder are adherent to lower uterine segment. Immediate decision for cesarean hysterectomy was undertaken. Urologist was called immediately. Her intra-operative blood loss was around 3 litres. Patient was in collapsing state with falling saturation and blood pressure. Immediately intubation was done and converted to general anaesthesia.

- Subtotal hysterectomy done. Cystotomy of the bladder dome was done to separate the placenta, partial cystectomy done and bladder repair was done in layers with suprapubic bladder catheter was placed. Abdominal drain was kept and abdomen closed in layers. A total of 10 units of packed cells and 7 units of FFP transfused during intra-operative and postoperative period. Patient was monitored in ICU constantly by CVP and urinary output. Postoperative period was uneventful. Abdominal drain removed on postoperative day 4. Suprapubic catheter was removed on postoperative day 10 and Foleys catheter removed on day 14. She was discharged on postoperative day 10 with a healthy baby. Histopathological report showed chorionic villi involving endometrium, myometrium and serosa suggestive of placenta percreta.



Figure 1: Post op specimen showing placenta adherent to the uterus

III. Discussion

Placenta percreta is a life threatening obstetric emergency condition. The incidence of abnormal placentation has increased from 1 in 2500 in the 1980s to 1 in 533 in 2000 [4]. It was seen that in the presence of a placenta previa, the risk of adherent placenta was 3%, 11%, 40%, 61%, and 67% for the first, second, third, fourth, and fifth or greater repeat cesarean deliveries, respectively [5]. Maternal morbidity significantly increases in the presence of abnormal placenta. Placenta percreta can lead to bowel injury, bladder injury, life-threatening hemorrhage, coagulopathy, amniotic fluid embolism, and peripartum hysterectomy. It has been associated with a maternal morbidity rate of 9.5% and a perinatal mortality of 24% . The incidence of accreta is 0.1 to 2.3 per 1000 births, while the incidence of percreta is 0.03 per 1000 births [6]. An early diagnosis of placenta percreta is made in high-risk patients using ultrasonography and/or magnetic resonance imaging (MRI). Ultrasound criteria for diagnosis are loss of the retroplacental sonolucent zone, thinning or disruption of the hyperechoic serosa–bladder interface, presence of focal exophytic masses invading the urinary bladder and abnormal placental lacunae. Colour Doppler findings are diffuse or focal lacunar flow, vascular lakes with turbulent flow, hypervascularity of serosa–bladder interface and markedly dilated vessels over peripheral subplacental zone. MRI is better at detecting the depth of infiltration in cases of placenta accreta and the main MRI features include uterine bulging, heterogeneous signal intensity within the placenta and dark intraplacental bands on T2-weighted imaging [7]. Management consists of a multidisciplinary approach. The planning of delivery should involve an anesthesiologist, obstetrician, pelvic surgeon such as a gynecologic oncologist, intensivist, maternal–fetal medicine specialist, neonatologist, urologist, hematologist, and interventional radiologist to optimize the patient’s outcome. The main principle in management is to achieve a planned delivery because studies suggest greater blood loss and complications in emergency cesarean hysterectomy versus planned cesarean hysterectomy [8]. The recommended management of suspected placenta percreta is planned cesarean hysterectomy ideally at 34-36 weeks. Occasionally, a subtotal hysterectomy can be safely performed, but persistent bleeding from the cervix may need total hysterectomy.

Women with any type of adherent placenta should be treated at a specialist center. Identifying the extent of infiltration by the placenta and performing preoperative placement of bilateral iliac artery balloon catheters to be inflated after delivery can considerably reduce the bleeding [9]. Preoperative placement of ureteral stents can help identify the ureters, allowing more rapid completion of the hysterectomy [10].

IV. Conclusion

Placenta percreta is an uncommon but obstetric emergency condition which is associated with high maternal mortality and morbidity. Our experience indicates that early diagnosis by imaging, proper antenatal management, timely delivery and decision for cesarean hysterectomy performed under controlled circumstances with proper multidisciplinary management significantly reduces maternal mortality and morbidity.

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