

**MAJOR PLACENTA PREVIA WITH ASSISTED VAGINAL DELIVERY AND
PRIMARY POSTPARTUM HEMORRHAGE: A CASE REPORT.**

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Summary

An unbooked 20 year-old primigravida presented at 36 weeks gestation with severe antepartum hemorrhage due to major placenta previa in shock. She fell into labour during resuscitation prior to emergency caesarian section. She had outlet forceps delivery of a fresh still birth and developed primary postpartum hemorrhage. She was managed with uterotonics, anti-shock garment and uterine packing with blood transfusion and antibiotics.

Keywords: *Placenta previa, uterotonics, anti-shock garment*

Introduction

Placenta previa is one of the main causes of vaginal bleeding in the third trimester¹ complicating about 0.3 to 0.6% of all pregnancies². It also accounts for significant maternal morbidity and perinatal morbidity and mortality³. Although the etiology of placenta previa remains speculative, several risk factors associated with this condition include advanced maternal age, multiparity, multiple gestation, smoking during pregnancy, a male fetus, previous history of placenta previa, previous uterine scar following instrumentations, myomectomy and previous caesarian delivery^{4,5}. While it has been established that minor placenta previa away from the internal os be delivered vaginally and caesarian section is reserved for major placenta previa⁶, we present an unusual case report of a patient with major placenta previa that delivered vaginally during resuscitation prior to emergency caesarian section.

Case Report

Mrs. A.K is an unbooked 20 year-old primigravida referred from a General Hospital of a neighbouring state at 35 weeks gestation with a day history of painless unprovoked vaginal bleeding and a 4-hour history of abdominal pain. Bleeding was profuse with associated dizziness. She had a similar episode of painless vaginal bleeding a week before presentation which was not reported in any health facility but resolved spontaneously. She registered for antenatal care in a traditional birth attendant clinic without any anti-tetanus immunization. She had an abdominal ultrasound done just before referral which revealed type III anterior placenta previa.

Examination revealed a young lady, severely pale, afebrile and restless with pulse rate of 120 beats/minute and blood pressure of 90/40mmHg. The fundal height was compatible with 36 weeks gestation of a singleton fetus in longitudinal lie and cephalic presentation. The fetal heart tone was absent. Vaginal inspection revealed blood clots and an assessment of antepartum hemorrhage secondary to placenta previa with intra-uterine fetal death was made.

She was admitted and resuscitation commenced with double intravenous lines for fluid and blood transfusion. Urgent hemoglobin concentration done was 5.2g/dl and 6 units of blood were ordered while the theatre was prepared for emergency caesarian section.

While on the second unit of blood transfusion, she developed the urge to bear down and was quickly transferred to the theatre. Vulva inspection revealed visible placenta tissue and bulging perineum. Digital vaginal examination showed fetal head in the vagina in occipito-anterior position. She had outlet forceps delivery of a fresh male stillbirth weighing 2.7kg. The placenta, though ragged, was subsequently delivered completely with the membrane after oxytocin infusion. Genital tract was explored and found to be intact.

She developed severe uterine atony unresponsive to oxytocin infusion, intramuscular ergometrine and rectal misoprostol. Uterine cavity was packed with warm and moist sterile gauze before bleeding was brought under control. Delay in getting blood for further transfusion necessitated the use of non-pneumatic anti-shock garment (NASG) which stabilized the cardiovascular system till blood was available. After blood transfusion with five units of whole blood and hemodynamic stability, both the anti-shock garment and uterine packs were removed 26 hours later. She also had prophylactic antibiotics, analgesic and hematinics after delivery. She was discharged 5 days later in good condition with hemoglobin concentration of 8.7g/dl.

Discussion

The management of placenta previa depends on the gestational age, clinical presentation, severity of bleeding and degree of placenta previa. With history of predisposing factors, clinical presentation of recurrent painless vaginal and ultrasound scan in late third trimester, most cases presenting with antepartum hemorrhage would already be known to have placenta previa⁷. Though no identifiable risk factor was seen in this reported patient, the history of recurrent painless and unprovoked vaginal bleeding is enough to arouse the suspicion of the condition which was subsequently diagnosed, albeit lately, with ultrasound scan.

Conservative management of cases of placenta previa remote from term is advised to allow fetal lung maturity because prematurity is the commonest cause of perinatal

mortality². Though, fetal death is relatively uncommon in placenta previa, it can occur following massive blood loss leading to exsanguination of the fetus. Immediate delivery via emergency caesarian section after stabilization / resuscitation is the norm in patients with life-threatening hemorrhage like in this case. The ensuing labour during resuscitation was not unusual but the presence of placenta tissue protruding from the vulva in second stage is not a common occurrence. Vaginal delivery of dead fetus in major placenta previa may be possible following autolysis of the placenta⁸.

Following outlet forceps delivery, the subsequent primary post-partum hemorrhage due to uterine atony and bleeding from the placenta bed worsened the hemodynamic status despite active management of third stage of labour. Having ensured intact genital tract and empty uterine cavity, good uterine packing with antibiotics cover has been known to control primary post-partum hemorrhage secondary to uterine atony without any significant complication⁹. The delayed availability of blood for transfusion and imminent shock warranted the use of non-pneumatic anti-shock garment to provide hemodynamic stabilization, marked reduction in vaginal bleeding and restoration of vital signs¹⁰. This garment exerts its action by translocating blood from the lower part of the body to the central circulation and the brain to enhance vital organs perfusion while awaiting blood transfusion, evaluation and definitive intervention to resolve the primary post partum hemorrhage.

The detection of placenta previa should encourage a careful evaluation with timely delivery in order to reduce the associated maternal and perinatal complications.

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