

Case Report

Uterovaginal Prolapse Complicated by Antepartum Haemorrhage in Shock in Latent Phase of Labour: A Case Report

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Abstract

Background: The Occurrence of uterovaginal prolapse complicated by antepartum haemorrhage is very rare. Complications include fetal demise, maternal sepsis, and death. This case report presents the rare occurrence of uterovaginal prolapse in a grand multiparous woman who presented in shock and in latent phase of labour, and subsequently had a successful vagina delivery. **Case summary:** A 30-year-old unbooked G6P5+0, 3A woman at 37week 2 days presented with complaint of protrusion and bleeding per vaginum of 3 weeks duration. She was referred as a case of antepartum haemorrhage. At presentation, her pulse rate and blood pressure were 120bpm and 80/50mmhg respectively. The symphysio-fundal height was 33cm with palpable uterine contractions and fetal heart tones were present. Vaginal examination revealed visible cervix and lower uterine segment 4cm below the introitus. The prolapsed cervix was oedematous with multiple ulcers and bleeding edges. The cervix was 2-3cm dilated, 3cm long and soft with the fetus in cephalic presentation at station 0⁻¹ and the membranes were intact. She was resuscitated, placed in Trendelenburg position, and given parenteral antibiotics, analgesic and buscopan. In 2nd stage of labour, the cervix was well guarded with normal saline soaked abdo-pack to prevent cervical tear and 7 hours after admission to the labour ward, she delivered a live female neonate who weighed 2800g and the estimated blood loss was 300ml. Her postpartum period was uneventful with spontaneous reduction of the prolapse; she was discharged on her third postpartum day and subsequently followed up at the postnatal clinic. **Conclusion:** Uterovaginal prolapse complicated with antepartum haemorrhage in shock is very rare. Management of uterovaginal prolapse during labour should be individualized on the basis of fetal condition and the severity of prolapse. Expectant management is a good option when there is no obstructed labour, as in our case, where the patient delivered vaginally and the prolapse resolved postpartum.

Keywords: Uterovaginal prolapse, shock, Multigravida, Latent phase of labour.

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Introduction

Pelvic organ prolapse complicating pregnancy is rare. An irreducible uterine prolapse during pregnancy is an extremely rare event and can lead to significant complications of pregnancy and labour including severe cervical oedema and dystocia.^{1,2} It can result in preterm labour, spontaneous abortion, fetal demise, cervical laceration, maternal urinary

complications, maternal sepsis, and death.³ The rate of adverse pregnancy outcomes has decreased dramatically since the past century, probably due to changes in obstetric practice and advances in neonatology. The overall fetal mortality rate in women with pelvic organ prolapse (POP) in pregnancy was 22% in 1941.¹ However, 8 perinatal deaths have been reported since 1990 and these were all in developing countries.⁴ Early recognition of the

condition and close follow up is essential to avoid possible maternal and fetal risks during pregnancy and labour. A case of an irreducible uterine prolapse complicated with antepartum haemorrhage in shock in latent phase of labor is hereby reported. It is hoped that this will add to the existing literature on this rare condition and help clinicians when making crucial decisions when faced with a similar case in the future.

Case Presentation

A 30-year-old unbooked G6P5,3A woman, who was unsure of her last normal menstrual period, but claimed to be 9 months pregnant, was referred from a primary health care facility to Federal Teaching Hospital Katsina. She was referred as a case of antepartum haemorrhage. Obstetric ultrasound done at presentation put her estimated gestational age to be 37 weeks 2 days. She presented to the labour room with complaint of protrusion and bleeding per vaginum of 3 weeks duration. The protrusion was said to be insidious in onset, worsened by squatting and while defecating, initially spontaneously reducible, later became manually reducible then became non-reducible over the last 3 days prior to presentation. She had a previous history of similar protrusion during her 3rd and 4th deliveries which ended up with intra-partum fetal demises. The protrusion however would resolve following delivery only to recur in labour. She had history of prolonged labour and unsupervised home delivery in her 1st and 2nd pregnancies. She frequently engages in heavy load lifting, including work like pounding of farm products. There was associated fever, ulceration of the protrusion and bleeding from the protruded part. There was history of headache and dizziness but no syncope. No history of urinary incontinence or retention, no drainage of liquor and she affirmed to fetal movement.

On examination, she was conscious, pale, febrile (38.0 ° C), in painful distress, not dehydrated, with clammy extremities. Systemic examination revealed she was tachycardic and hypotensive with pulse rate of 120bpm and blood pressure of 80/50mmhg respectively, SpO2 was 95%. On per abdominal examination, her fundal height was corresponding to 33 weeks of gestation, but fundal height was not a good reference for pregnancy duration as the uterus was prolapsed and the fetus' head was inside the prolapsed uterus, thus probably resulting in underestimation of fundal height. The fetus was in longitudinal lie, cephalic presentation, and 3 palpable strong uterine contractions were found. The fetal heart rate was 140bpm on auscultation. Bed side ultrasound was done to estimate the fetal weight, which was 3.1kg as well as confirm the placental location which was fundal. Vaginal examination revealed findings of a visible

cervix and lower uterine segment 4cm below the introitus, oedematous with multiple ulcers and bleeding edges, cervix was 2-3cm dilated, 3cm long, soft and central. The presenting part was vertex at station 0⁻¹ and the membranes were intact. An assessment of uterovaginal prolapse complicated by antepartum haemorrhage and shock in latent phase of labour was made.

Her blood investigations showed 7.4 g/dL haemoglobin and renal function tests were normal. A Foley catheter was used to empty the bladder and it was retained. After the initial emergency measures, she was counselled, and a decision was made for vaginal delivery. She was managed conservatively with bed rest in Trendelenburg position. Parenteral antibiotics, analgesic, hyoscine, and blood transfusion were given. Warm normal saline soaked abdo-pack was used to wrap the lower uterine part and the oedematous cervix.



Fig 1 Showing Prolapse Uterus in Latent Phase.

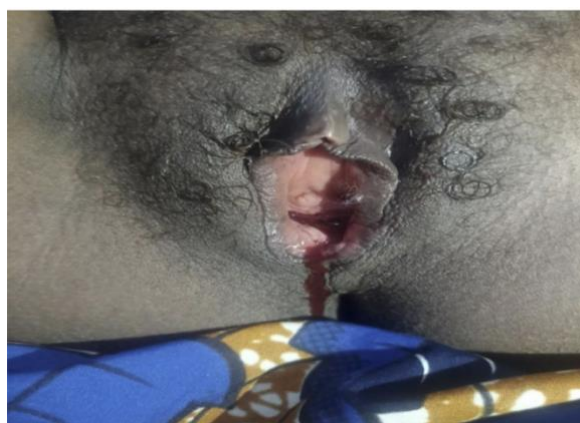


Fig. 2 Showing Image of Complete Spontaneous Reduction of the Prolapse.

Labour was monitored partographically, she was placed on continuous electronic fetal monitoring. Artificial rupture of membrane was done at advanced cervical dilatation. In 2nd stage of labour, the cervix was well guarded with normal saline soaked abdo-pack to prevent cervical tear, and 7 hours after admission to the labour ward, she delivered a live female neonate with good Apgar score weighing 2800g and the estimated blood loss was 300ml. The baby was handed to the neonatologist for observation. After delivery, the patient was managed

conservatively. The prolapsed oedematous cervix reduced back into the vagina after it was washed with normal saline each time it prolapsed, and oral antibiotics and analgesics were given. She was nursed in Trendelenburg position. The urinary catheter was removed after 24 hours, and she was examined for stress incontinence which was absent in her. The size of prolapse reduced gradually. After 24 hours of delivery, she had completed spontaneous reduction of the prolapse. She was observed for 3 days. At 2nd and 6th week's postpartum follow up, her condition was satisfactory without any pessary on.

Discussion

This case report presents a rare case of uterovaginal prolapse in multigravida complicated with antepartum haemorrhage and shock in latent phase of labour. Pelvic organ prolapse (POP) is a common condition but its occurrence in pregnancy is rare and may be present with complications. Genital prolapse can be aggravated by pregnancy due to physiological increases in cortisol and progesterone, which lead to a simultaneous softening and stretching of the pelvic tissues. The risk factors of uterine prolapse during pregnancy may be multifactorial; including multiparity, age, malnutrition, race, vaginal delivery, short interval between consecutive pregnancies, physiologic change of pregnancy causing cervical elongations, and previous history of prolapse.^{7,8} Operative vaginal delivery with forceps is an important risk factor for development of POP.^{9,10} Our patient, who was a grand multipara had many risk factors for uterine prolapse especially previous history of prolapse in 2 pregnancies.

Pelvic organ prolapse (POP) presenting before pregnancy is less common and resolves during pregnancy, but the acute onset of POP in pregnancy is more common.⁷ Acute onset of POP during pregnancy is often first recognized during third-trimester pregnancy.⁷ Acute onset of POP most frequently occurs in the second trimester of pregnancy. However, it was first recognized in labor in some case reports,⁴ similar to our patient's presentation. When it occurs prior to labour, reports show that most patients could be managed with either bed rest, pessary, manual reduction and local treatment and gasless laparoscopic uterine suspension at the 13th week of pregnancy (with a good pregnancy outcome).⁴ Bed-rest was commonly associated with inpatient care and the moderate Trendelenburg position.^{11,12} Management is usually conservative with an emphasis on keeping the cervix reduced throughout pregnancy and labour and on protecting the cervix from trauma and infection.¹² These initial conservative measures are often combined with generalized lifestyle advice, for example, smoking cessation, avoidance of heavy

lifting, treating chronic cough, treating constipation, and Kegel exercises.^{4,13} She had fluid resuscitation, intravenous antibiotics, analgesics and hyoscine. Hyoscine can help in reducing the cervical oedema. She was not placed on anti-shock garment because there was no active bleeding at presentation.

Complications of POP in pregnancy are common and they have been well reviewed.¹⁴ Maternal or foetal death can result from a lack of care and uterine ischaemia, infection, acute urinary retention, or obstructed labour. This is now rare in developed countries because of better access to medical care. No maternal deaths have been reported since 1990. Only 8 foetal deaths occurred, and these were all in developing countries.⁴ Even though there was fetal death in a recent publication due to respiratory failure secondary to meconium aspiration syndrome as a possible cofactor as there was grade 3 meconium-stained liquor.¹⁵ Our patient had a live birth of average fetal weight.

The main antepartum complication in pregnant women with prolapse is preterm labour.⁴ Intrapartum complications of uterovaginal prolapse include the inability of cervical dilatation, cervical dystocia due to oedema, cervical laceration, and obstructed labour with the possible risk of uterine rupture.^{2,4} Our patient had none of the above-mentioned complications.

Management of the prolapse in labour should be individualized, and the managing obstetrician must have possible complications in mind. Bed rest in the Trendelenburg position should be advised to decrease oedema and displacement of the uterus especially during labour as done in this patient.^{4,13,14} Local therapy with glycerine and an antiseptic agent have been applied when ulcerations and excoriations of the prolapsed cervix have arisen and in some cases antibiotics administered.¹⁶ In 1 case,¹⁷ caesarean section was avoided after application of concentrated topical magnesium sulphate to reduce the oedema of a prolapsed cervix that could not be reduced. Gauze soaked in a solution of 20 g magnesium sulphate in 50 ml of normal saline was applied, resulting in reduction. The prolapse was then "held back" with magnesium sulphate-soaked gauze during the first stage of labour. No clinical signs or symptoms of systemic absorption of magnesium were observed,¹⁷ this index case benefitted from the use of warm normal saline soaked abdo-pack. Women with severe prolapse are at increased risk of caesarean section due to obstructed labour; however, vaginal delivery is not contraindicated.^{4,13} As an alternative, Dührssen incisions (i.e. three surgical incisions corresponding to the 2, 6 and 10 o'clock positions [8]) have been used to an incompletely dilated cervix to facilitate vaginal delivery with an oedematous and incarcerated cervix. Our patient had a successful vaginal delivery. Primary caesarean section is an option in cases of severe POP

with onset in pregnancy, as it seems to be protective against POP persistence after delivery.^{4,13}

Conclusion

Uterine prolapse in pregnancy with antepartum haemorrhage and shock in labour is rare. There is no guideline to the management of such patients hence treatment needs to be individualised based on fetal condition and the severity of prolapse. In any phase of labour, an enlarged, oedematous uterine cervical prolapse needs close surveillance and can be managed conservatively. Caesarean section should only be offered if there is an obstetrics indication.

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