

Case Report

Uterine prolapse as an unusual cause of obstructed labor: A case report

Aliyu Usman El-Nafaty^{1,*}, Calvin Mailaya Chama¹, Habibah Ibrahim Ismail², Saidu Abubakar Kadas²

¹ Department of Obstetrics and Gynecology, University of Maiduguri Teaching Hospital, Maiduguri, Nigeria

² Abubakar Tafawa Balewa University Teaching Hospital, Bauchi, Nigeria

Abstract

The occurrence of uterine prolapse during pregnancy is rare. The aim of this report is to highlight uterine prolapse as a rare cause of obstructed labor and discuss its associated complications and management challenges. A 29-year-old gravida 5 parity 4 woman was presented with uterine prolapse, obstructed labor due to cervical dystocia and intrauterine fetal death. She was underwent emergency classical caesarean section and bilateral tubal ligation. The prolapse was managed conservatively with saline dressing. The patient was uneventful in postpartum period.

Key words:

Uterine prolapse, classical cesarean section, obstructed labor, pregnancy

Introduction

The overall incidence of uterine prolapse in pregnancy has been estimated to be 1 per 10,000 to 15,000 deliveries worldwide [1]. A stage three prolapse is said to exist when the most distal portion of the prolapse is > 1 cm below the plane of the hymen but protrudes no further than 2 cm less than the total vaginal length in centimeters [2,3]. The cervix, and occasionally a portion of the body of the uterus, may protrude to a variable extent beyond the introitus during early pregnancy. However, with advancement of the gestation, the uterus usually rises above the pelvis and may draw the cervix up with it. If the uterus persists in its prolapsed position, it may be entrapped within the pelvis and become incarcerated in the late first trimester. To prevent this, the uterus is replaced early in pregnancy and held in position with a suitable pessary [4,5].

Risk factors of uterine prolapse include weakness in the pelvic fascial supports in multiparas [6], partial denervation of the pelvic muscle [7] and increased intra-abdominal pressure. Majority of patients with mild prolapse will have uncomplicated pregnancy and delivery with conservative management [2, 4, 8-10].

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*Correspondence: Departments of Obstetrics & Gynaecology
University of Maiduguri Teaching Hospital, PMB 1414, Maiduguri, Nigeria
E-mail: elnafaty@hotmail.com Tel: +234-803599 4584 (Dr. A. U. El-Nafaty)

Case presentation

A 29-year-old gravida 5 parity 4 woman was admitted to the obstetrics emergency unit with complaints of protrusion per vagina and failure to deliver after seven hours of labor at home. She first noticed the protrusion at 14th weeks and she was able to reduce manually. It became severe and irreducible with the onset of labor. Otherwise the pregnancy had remained uneventful. She had four spontaneous vaginal deliveries of term pregnancies. During the second and the third deliveries, the labors were unduly prolonged and the babies looked bigger than her two other deliveries but the birth weights were not known.

She was in painful distress and fundal height was measured 34 cm in height. Moreover, uterus was contracting and tender. On pelvic examination, a very edematous and enlarged uterine cervix protruding out of the introitus and measuring about 14 cm in length and 10 cm in width. The fetal scalp was seen through the partially dilated cervix (Figure 1 and 2). Ultrasound scan revealed intrauterine dead fetus. A diagnosis of severe uterine prolapse, obstructed labor due to cervical dystocia and intrauterine fetal death was made.

She was immediately resuscitated and options of abdominal or vaginal delivery were discussed with the patient. The cesarean section with classical uterine incision was favored. The intraoperative findings were edematous bladder and thinned lower uterine segment with impacted fetal shoulders in the pelvis. A classical cesarean section with bilateral tubal ligation by the Poomeroy's technique was done. A fresh still birth was delivered by breech extraction. The baby's weight was 2900 gram. The prolapsed cervix

was irrigated with warm saline and covered with gauze dressing. It could not be reduced into the vagina immediately after delivery because of massive edema (Figure 3).

The postnatal period was uneventful. On the second day of delivery, the cervical edema had reduced drastically. The dressing was removed and the cervix reduced back into the vagina. She was discharged on the postpartum seventh day in good health. The patient was counselled for further assessment and treatment regarding uterine prolapse.

Figure 1.



Prolapsed cervix with entrapped fetal head (anterior view)

Discussion

This case illustrates one of the rare complications of uterine prolapse in pregnancy; obstructed labor due to cervical dystocia and intrauterine fetal death. The cause of the fetal demise was due to severe hypoxia, the fetus was strangulated at the introitus. Acute and gross edema of the prolapsed cervix as seen in our patient was due to

Figure 2.



Prolapsed cervix with entrapped fetal head (lateral view)

Other documented uterine prolapse in pregnancy complications include abortion, preterm labour, urinary retention, severe edema [3,4,8-10]

Another factor contributing to this patient's complication was poverty. She sought medical treatment before the recent event but could not afford the cost for the surgery. Moreover government hospital services are not free.

The choice of classical caesarean section was preferred as the fetal body was impacted deep into the pelvis. Moreover, a lower segment incision was not feasible and would result in difficult delivery of the head and the rest of the fetus, with risk of lateral extension of the incision. Bilateral tubal ligation was done to avert potential uterine rupture in future pregnancies in view of the poor health care delivery system. A Dührssen incision would have been done in delivering the fetus if the cervical dilatation had been about 9 cm. However, this was not carried out in this case because of the risk of hemorrhage.

The prolapsed cervix was not reducible after delivery of the fetus because of the massive edema, it was dressed with moist saline gauze. Two days later the edema had drastically reduced, the dressing was removed and uterus was reduced into the vagina. Alternatively magnesium solution dressing could also be used [10]. There was no attempt to treat the prolapse at that moment, because priority was to save maternal life. The definitive treatment will be carried out after the puerperium when detailed assessment would have been done to determine the best mode of treatment.

Figure 3.



Prolapsed uterine cervix after delivery of the fetus

In conclusion, this paper has highlighted the uterine prolapse as one of the rare cause of obstructed labor with its related complications and the management challenges. Unless managed properly, uterine prolapse could seriously jeopardize both maternal and fetal health during delivery.

Conflict of interest statement

The authors declare no conflict of interest.

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