



Uterine prolapse in a term pregnancy: A case report

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ABSTRACT

Uterine prolapse is a rare condition in pregnancy that may lead to serious antepartum, intrapartum and postpartum complications for the mother and fetus.

This is the case of a 30-year-old woman who presented at 38 weeks of gestation of her third pregnancy with spontaneous rupture of membranes and labor pain. Pelvic examination in dorsal lithotomy position revealed a stage 3 uterine prolapse, with a 3 cm dilated thick edematous cervix and rupture of membranes with clear liquor.

Four hours after admission, the cervix became more edematous and there had been no change in cervical dilatation. Therefore, advanced apical prolapse (negatively affecting labor) was diagnosed, and the obstetric team decided on a cesarean delivery because a lack of progression of cervical dilatation. A live female baby weighing 3400 g was delivered and no abnormal findings or complications were reported. The patient had uneventful postoperative course with a significant reduction in uterine prolapse. Six weeks post-delivery, assessment in the urogynecology outpatient clinic revealed spontaneous resolution of the prolapse. The woman was advised to perform pelvic floor muscle exercises and to seek medical advice if the condition recurred.

Obstetricians should be aware of this rare condition in pregnancy, as proper early diagnosis is crucial for a safe, uneventful pregnancy.

1. Introduction

Uterine prolapse is a form of pelvic organ prolapse in which the uterus, cervix and upper vagina protrude into vaginal canal or through vaginal introitus. [1]

It is uncommon in pregnancy, with an estimated prevalence of 1 in 10,000 to 1 in 15,000 pregnancies. [2] However, it may lead to serious antenatal, intrapartum and postpartum complications including miscarriage, preterm delivery and fetal demise, in addition to maternal urinary complications. [3]

The main cause of uterine prolapse is weakening of the supportive structures, which can be related to aging, multiparity, traumatic or operative vaginal delivery, prolonged labor, congenital weakness, smoking, collagen abnormalities and myopathy. [4]

Treatment options for uterine prolapse vary from conservative management to a laparoscopic surgical approach. [5] During pregnancy, most patients are managed conservatively by bed rest in the Trendelenburg position and application of a suspensory pessary. [6] However, the management approach should be individualized, depending on the severity of the prolapse and the gestational age.

Here we report a case of uterine prolapse in a term pregnant woman presenting with labor pain and spontaneous rupture of membranes.

2. Case Presentation

This is the case of a 30-year-old woman at 38 weeks of gestation of her third pregnancy. The pregnancy was a spontaneous and unplanned, and the patient had had irregular antenatal care visits. She had had two previous term vaginal deliveries, the first a forceps-assisted vaginal delivery and the second a normal vaginal delivery one year previously. The babies weighed 4000 g and 3800 g respectively.

The patient presented to the labor and delivery department with spontaneous rupture of membranes and labor pains that had started two hours earlier. Clinical examination showed normal vital signs and abdominal examination showed regular palpable contractions. Furthermore, pelvic examination in the dorsal lithotomy position revealed a stage 3 uterine prolapse, with a 3 cm dilated thick edematous cervix and rupture of membranes with clear liquor. (Fig. 1).

Four hours after admission, cardiotocography showed reactive fetal heart with regular uterine contractions 4 in 10; however, there was no

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Fig. 1. Uterine prolapse at presentation.

change in cervical dilatation and the cervix became more edematous. (Fig. 2).

After multidisciplinary counseling and discussion with the patient, a



Fig. 2. The cervix became edematous with no change in dilatation.

decision for delivery by cesarean section was made due to poor progress in labor and cervical dystocia that resulted from apical uterine prolapse. Intraoperatively, a transverse lower uterine segment incision was done and a live female baby weighing 3400 g was delivered. No abnormal findings or complications were reported.

After delivery, the patient had an uneventful recovery with a significant reduction of the uterine prolapse and she was discharged home on the third postoperative day. (Fig. 3) Six weeks later, assessment in the urogynecology outpatient clinic revealed spontaneous resolution of the prolapse. The woman was advised to perform pelvic floor muscle exercises and to seek medical advice if the condition recurred.

3. Discussion

Uterine prolapse is a common gynecological condition seen in nonpregnant and elderly women, but it is rarely reported in pregnancy. [2]

Acute-onset uterine prolapse is more common than pre-existing prolapse in pregnancy and it is usually noted for the first time in the second half of pregnancy and disappears after delivery. [7] In the case reported, the patient had an acute-onset apical compartment prolapse that she first noticed in the third trimester; however, she did not seek medical advice at that time.

There are many known risk factors for pelvic organ prolapse, including age, chronic increase in intraabdominal pressure, smoking, collagen disease and prior pelvic surgery. In women of reproductive age, the main risk factors are multiparity, childbirth trauma, prolonged labor, operative vaginal delivery, and short inter-pregnancy interval. [4] This patient had a combination of risk factors, including multiparity, previous forceps-assisted vaginal delivery, short interval between consecutive pregnancies, as well as babies that were quite large.

Antepartum complications caused by uterine prolapse may include abortion, preterm labor, urinary tract infection and urinary retention. Moreover, the major intrapartum complication is obstructed labor due to an inability to achieve adequate cervical dilatation. Postpartum complications include postpartum hemorrhage and puerperal infection. [3] The patient in this case report had an obstructed labor; the cervix became edematous with no change in cervical dilatation.

Conservative management with perineal hygiene, bed rest in the



Fig. 3. Significant reduction in uterine prolapse post-delivery by cesarean section.

Trendelenburg position and pessary placement are recommended as the first-line treatment for antepartum uterine prolapse. [6] Furthermore, the method of delivery should be individualized according to the degree of prolapse, labor progression as well as the patient's preferences. Elective cesarean section is recommended for the majority of cases. Nonetheless, vaginal delivery can be a valid option. [8] In our case report the patient was delivered by cesarean section due to failure to progress in labor and cervical dystocia.

Follow-up is fundamental, as the majority of patients with acute uterine prolapse presenting for the first time in pregnancy will have spontaneous resolution of the prolapse after delivery, as in the present case.

4. Conclusion

In conclusion, this is a very rare case of advanced apical prolapse that negatively affected the dynamics of labor, thus leading the obstetric team to decide on a cesarean delivery because a lack of progression of the cervical dilatation. All physicians and nurses in obstetric units should be aware of this rare but critical anatomical condition that in some cases could disrupt labor.

Contributors

Lina Ba'Abbad contributed to patient care, conception of the case report and undertaking the literature review.

Marwa Turki contributed to patient care, acquiring and interpreting the data, and drafting the manuscript.

Ghada Aldossary contributed to patient care, acquiring and interpreting the data, and drafting the manuscript.

Nouar Elzewawi contributed to patient care, acquiring and interpreting the data, and drafting the manuscript.

Heba Abu Saleem contributed to drafting the manuscript, undertaking the literature review and revising the article critically for important intellectual content.

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Patient consent

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Conflict of interest statement

The authors declare that they have no conflict of interest regarding the publication of this case report.

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