

## Uterine prolapse during pregnancy: A case report

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### ABSTRACT

Pelvic organ prolapse (POP) in pregnancy is a rare condition, with potentially serious complications for both mother and fetus. The scope of complications includes urinary retention, premature delivery, fetal demise, and maternal sepsis. In this case report, we present a 35-year-old individual at 30-week gestational age with a stage 2 POP treated conservatively with bed rest in a slight Trendelenburg position, with corticosteroids and symptomatic treatment for pain relief. In this case, an innovative proposal was developed involving outpatient management with biweekly visits in prenatal care after the previously mentioned measures were carried out in 5 days that the pregnant woman was hospitalized. Conservative treatment of these patients throughout pregnancy can result in an uneventful, normal, and spontaneous delivery, as in this case where the patient evolved without complications leading to vaginal delivery occurring at 37 weeks. Early recognition of this condition is crucial and, together with proper management-related complications, such as preterm labor and trauma during delivery, can be avoided.

**Key words:** *Cervix, Parity, Pelvic organ prolapse, Pregnancy*

**P**elvic organ prolapse (POP) in pregnancy is a rare condition, which can be pre-existent or manifest during pregnancy. The incidence of one case in 13–15 K has probably decreased considerably, which may be related to the decrease in parity, which is currently occurring mainly in developed countries [1,2].

POP can present at any stage of the pregnancy, but it usually occurs in the first or second trimester. Every obstetrician should be familiar to deal with it as it poses several management dilemmas [3]. Multiparity is one of the established risk factors for the pathogenesis of POP; however, uterine cervical prolapse also complicates pregnancy in nulliparous women [4]. The main antepartum complication in pregnant women with POP is preterm labor. Urinary tract infection, acute urinary retention, and even maternal death have also been reported as complications arise from POP during pregnancy [2,3].

The treatment of prolapse, especially cervical prolapse, has evolved from the interruption of pregnancy to pessary use and bed rest in the Trendelenburg position [5]. The management of POP antenatally is mainly conservative symptomatic relief, followed by a period of rest to reduce the prolapse, and in cases of uterine/cervical prolapse, to provide a degree of protection from injury and desiccation. Surgical correction of POP during pregnancy is not only routinely undertaken, primarily due to the possible risks to both mother and fetus, but also as the long-term consequences are unknown [3].

We present a case of a pregnant woman with cervical prolapse during her third trimester, with the intention to show that in uncomplicated pregnancies with uterine prolapse diagnosed in the last trimester, strict prenatal follow-up can prevent complications related to genital prolapse during pregnancy and that there can be full-term natural delivery without serious consequences for both mother and fetus.

### CASE REPORT

A 35-year-old woman (gravida 3 and para 2) at 30-week gestational age presented at the emergency room complaining of lower abdominal pain, mild genital bleeding, and a feeling of something descending into the vagina. She had two previous vaginal births 10 and 2 years ago. She was diagnosed as having second-degree uterovaginal prolapse 11 months after her second delivery. She did not wish for any treatment then.

On abdomen examination, fundal height was 29 cm, uterus was soft, without contractions, and fetal heart rate was 140 beats/min. During the pelvic examination, the entire uterine cervix was prolapsed and lying on the vulva (Fig. 1), the external cervical orifice was closed with slight bleeding, and she was diagnosed with a stage 2 prolapse, according to the POP Quantification system (POP-Q). On investigation, hemoglobin was 12.6 g/dl, white blood cell count was 9330/cm<sup>3</sup>, and urinalysis test was normal.

An ultrasound scan revealed a single fetus with good vitality, transverse lie, and shoulder presentation. The estimated fetal weight was 1520 g and amniotic fluid index was 8.2 cm, with an estimated gestational age of 30 weeks and 4 days (Fig. 2).

Conservative management with bed rest in a slight Trendelenburg position was chosen. Corticosteroids and symptomatic treatment for pain relief were administered. After bed rest, her cervix was interiorized and descended normally during walking or straining. She was discharged after 5 days with the guidance of following the same recommendations she received during the period of hospitalization, leaving home only every 2 weeks to perform prenatal care. She had spontaneous labor onset at 37 weeks of gestation and had normal vaginal delivery. She developed only moderate bleeding in the immediate postpartum period controlled with intravenous oxytocin, and 3 days after delivery, she was discharged in good clinical conditions with the recommendation to perform a surgical correction of the genital prolapse.

## DISCUSSION

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. An impairment of blood flow and cervical edema with subsequent

tissue anoxia may contribute to increased incidence of abortion and preterm labor with POP [5,6].

Age and parity do not seem to be risk factors for POP in pregnancy. POP presenting before pregnancy is less common and often resolves itself during pregnancy. Acute onset of POP in pregnancy is more common. A prolapse developing during pregnancy is more likely to be due to an escalation of the physiological changes in pregnancy that leads to the weakening of pelvic organ support [1]. This report describes a case of a uterine prolapse in a multiparous woman during the third trimester.

Uterine prolapse during pregnancy most frequently occurs in multiparous women, usually during early gestation. Cervical uterine prolapse most commonly occurs up to and during the early part of the second trimester. It appears that prolapse noted before pregnancy is not necessarily a bad prognosis in comparison to those which are usually first noted in the third trimester; since with advancing gestational age, the collagenolytic activity increases and weakens connective tissue which in turn favors preterm labor and subsequent POP [2,7,8].

Management is usually conservative with an emphasis on keeping the cervix reduced throughout pregnancy and labor and on protecting the cervix from trauma and infection [8]. The management plan must be individualized, with the obstetrician considering the risks. Bed rest in a moderate Trendelenburg position as indicated in this case is advised to reduce edema and displacement of the uterus. Good genital hygiene is imperative, and local antiseptics should be applied in the event of ulcerations or infected cervix. 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 [2,3].

The use of pessary is another mode of treatment that can be used in pregnancy complicated by a prolapse, especially that of a cervical prolapse. Historically, cervical prolapse was treated with the interruption of pregnancy due to the high incidence of early and mid-pregnancy losses. The development of the Smith-Hodgkin's pessary allowed for the management of the cervical prolapse by restoring the cervix to its normal position above the hymen by supporting it between the symphysis pubis and coccyx, which act as the paracervical support [5]. Alternatively, in cases where conservative solutions have failed, minimally invasive surgery on the gravid patient may be considered, for example, there is a new laparoscopic option for the treatment of uterine prolapse, otherwise known as the modified Gilliam suspension, when other conservative solutions fail or when prolonged bed rest is impossible. Laparoscopy, once feared and contraindicated in pregnancy, has been gradually accepted and applied, as an increasing number of reports published recently testify to its safety [2,9,10].

Women with various grades of existing prolapse who become pregnant are often anxious to avoid delivery vaginally and will often request a cesarean section to prevent worsening of the prolapse. However, when counseling women with prolapse during pregnancy or preceding the pregnancy, it needs to be emphasized

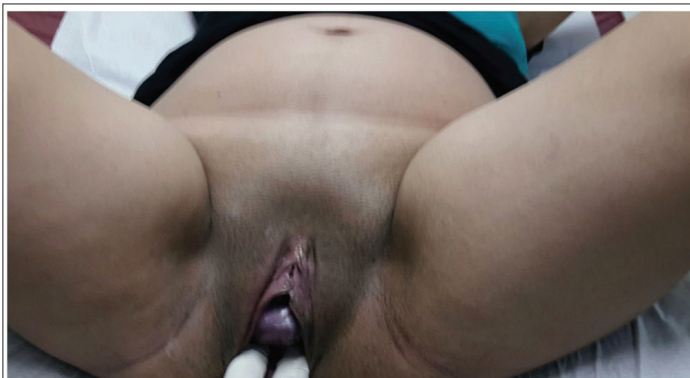


Figure 1: Pregnant woman with a stage 2 pelvic organ prolapse quantification

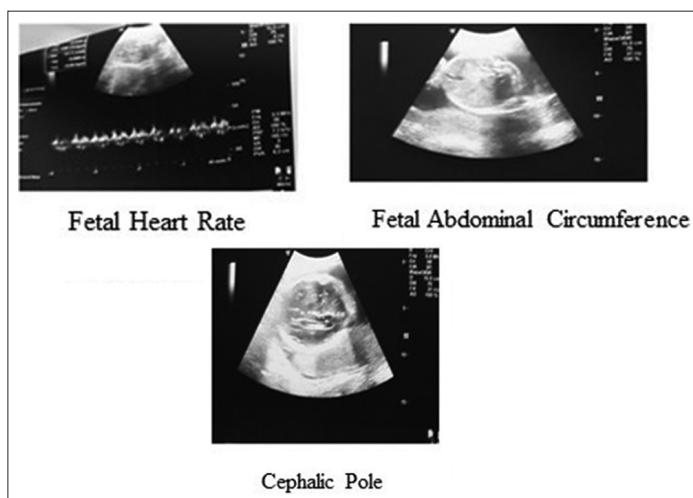


Figure 2: Ultrasound scan

that there is no evidence that delivery by cesarean section alters the long-term outcome, and there is insufficient evidence to suggest any proven benefits. The same is applicable to women who present with prolapse during their first pregnancy [3].

## CONCLUSION

The pregnant woman in the case herein was managed conservatively as most of the patients were described in the systematic review involving 41 pregnant women with POP. However, in comparison with the cases of the review, our patient was innovatively managed with strict prenatal follow-up and lifestyle advice. Although surgical management has been reported, conservative treatment, including bed rest and/or pessary treatment, has been the mainstay of therapy and can result in an uneventful pregnancy with spontaneous vaginal delivery.

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