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CLINICAL EXPERIENCES OF UTERINE PROLAPSE OCCURRING DURING PREGNANCY IN TWO CASE REPORTS

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Abstract

Prolapse is more common in older women. Uterine prolapse during pregnancy is a very rare condition but causes complications to both the mother and the fetus. Complications that arise vary from minor complaints such as discomfort, pain, infection, preterm labor, to obstructed labor which can cause maternal and fetal death. We report 2 cases- woman who is pregnant but is suffering from uterine prolapse. The first case, a 29-year-old woman, gravida 2 para 1 with grade 3 uterine prolapse, grade 3 cystocele, grade 3 rectocele, and cervical elongation, was first diagnosed at 24 weeks gestation. Her first pregnancy was born vaginally and weighed 3500 grams. This second pregnancy ended in a cesarean section at 36/37 weeks due to the long labor process, which may be due to cervical lengthening. In the second case, a 33-year-old woman, gravida 3 para 2 with grade 1 uterine prolapse and grade 2 rectocele was detected for the first time 3 years before pregnancy. Her first pregnancy was born vaginally and weighed 3500 grams, and the second pregnancy gave birth by an emergency cesarean section with a baby weight of 3100 grams. This third pregnancy ended abdominal at 40/41 weeks due to PROM and previous cesarean section. In both cases, no severe complications were found during the antenatal and puerperal periods in the case but early diagnosis and detection of possible complications are essential to achieve a good outcome. The management of each patient depends on the complications and patient condition.

Keywords: uterine prolapse, pregnancy, reproductive health

Introduction

Gynecological problems, one of which is uterine prolapse, is common in women. This case reached a prevalence of 50% and will increase by 45% in the next 30 years. This is in line with the increase in life expectancy that is being sought. Uterine prolapse cases are related to women's well-being and long-term lifestyle because they are related to sexual health and other biological needs [*Sayko S., et al 2018*]. Uterine prolapse is a herniation of the pelvic organs that attaches to the vaginal wall or outside the vaginal wall and is the most common gynecological problem caused by stretching and weakening of muscles and connective tissue. The incidence of total and partial uterine prolapse is about one per 10,000 to 15,000 births [*Zeng C., et al 2018*].

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Uterine prolapse is rare at reproductive age. According to the literature, if it occurs at reproductive age, let alone conception / pregnancy, it is likely that this case has manifested itself during pregnancy or has existed since before pregnancy [*Houmaid H., et al 2024*]. The management of this condition requires accurate recommendations and protocols as this is a rare case. Unfortunately, many programs seem outdated and unclear and overlap with the general management of pregnancy *[Tsikouras P., et al 2014]*. This case is rarely noticed because prolapse cases are prone to occur in elderly women [*De Vita D, Giordano S., 2011*]. Uterine prolapse and pregnancy in one woman are rare occurrences. The prevalence that occurs is one incidence in 10,000-15,000 pregnancies [*Farzaneh F., 2016*]. Many complications that occur and affect maternal health during the pregnancy process until delivery and the period after delivery. Premature delivery, abortion as well as infection and death are part of the consequences of uterine prolapse associated with pregnancy [*De Vita D, Giordano S., 2011*]. Maternal problems in pregnancy are complicated, especially coupled with uterine prolapse. In this paper we review two cases of integrated and complex management.

Case Report:

Case I

The woman, 29 years old, has a pelvic organ prolapse that first appeared during pregnancy. Before becoming pregnant, the patient had never complained of a lump in the pubic area. The patient can defecate and urinate normally without any complaints. This patient was a multigravida patient, with a history of spontaneous vaginal delivery and infant weight of 3500 grams. Genital lumps began to be felt in their second pregnancy at 3 months of gestation. The patient came for the first time at 25/26 weeks of her pregnancy. At that time, the pregnancy was in good shape. Clinical examination revealed grade 3 uterine prolapse and grade 2 cystocele. Ultra-sonographic examination was performed to evaluate the possibility of cervical lengthening. Her cervix was 6.48 cm long at 27/28 weeks of her pregnancy. Later she was also diagnosed with cervical lengthening. Prolapse does not get worse during pregnancy. It is planned that the patient will undergo an elective caesarean section at 38/39 weeks of gestation, based on the consideration that uterine prolapse and cervical elongation can lead to prolonged labor during spontaneous vaginal delivery. The gestation was finally stopped by emergency caesarean section at 36/37 weeks of gestation because there had been adequate contractions without cervical dilation and the patient complained of severe abdominal pain. The baby was finally born weighing 2,600 grams. During the caesarean section, no abnormalities were found. Post-caesarean section evaluation, the lump does not come out of the genitals anymore. The lump started to come out again since 2 months after giving birth. On evaluation twenty-two months after delivery, grade 3 uterine prolapse was obtained with cervical lengthening, grade 3 cystocele, and grade 3 rectocele. The patient was ordered to undergo purandare surgery and posterior colporaphy to correct the defect. Three months after correction, there was improvement in the pelvic organ prolapse (POP) rates with grade 1 uterine prolapse, grade 1 cystocele and grade 2 rectocele. The patient was treated with conservative therapy with pelvic floor muscle exercises later. Figure 1 show uterine prolapsed in pregnancy according to the gestation weeks.

Case II

This 33 year old woman, suffered from pelvic organ prolapse since 3 years prior to this pregnancy. It was her third pregnancy with 2 previous spontaneous vaginal deliveries (baby weight 3500 grams) and a history of emergency cesarean delivery due to labor congestion. Pelvic organ prolapse

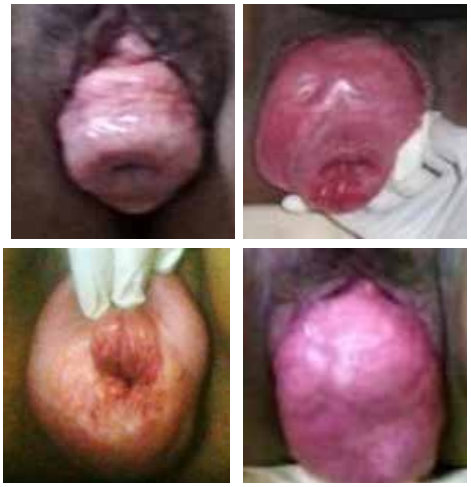

Figure 1. *POP case 1. (A) 25/26 weeks of pregnancy. (B) 27/28 weeks of pregnancy. (C) 32/33 weeks of pregnancy. (D) 35/36 weeks of pregnancy.*

begins 2 years after the second delivery. At that time the patient's complaint was that there was a lump that was felt on her genitals. Clinical examination revealed first degree uterine prolapse. The patient is treated with conservative therapy with pelvic floor muscle exercises. The patient first came for antenatal care for her pregnancy at 28/29 weeks of gestation. At that time, the pregnancy was in good shape. From the evaluation of gynecological organs, it was found that grade 1 uterine prolapse and grade II rectocele. The patient did not complain of any disturbance in urinating or defecating. There was no increase in the degree of pelvic organ prolapse during PAN and the condition of the mother and fetus was generally good. This patient was planned for vaginal delivery and postpartum sterilization. Finally, at 40/41 weeks of gestation, there were complaints of premature rupture of membranes that had occurred more than 12 hours earlier. Despite this, there were no signs of labor, and the patient who had had a previous cesarean section decided to deliver the fetus by emergency caesarean section followed by sterilization. The baby was born, a baby boy weighing 3100 grams with AS 8-9. During cesarean section, there were no abnormalities in the uterus and adnexa. Figure 2 showed Mason Trichromepainting on sacrouterina ligament tissue. figure 3 showed Mason Trichromepainting vaginal wall tissue.

DISCUSSION

Pregnancy is a process that requires good management because it is related to the welfare of the mother and the fetus [*Bagherzadeh R et al., 2021*]. In this case, pregnant women who need special treatment turned out to have to deal with cases of uterine prolapse. Pregnancy tends to trigger prolapse because increased cortisol and progesterone levels during pregnancy can contribute to uterine relaxation [*Hamahata et al., 2022*]. Pelvic organ prolapse is caused by lack of support or damage to the genitourinary due to repeated pregnancy or childbirth [*Houmaid H et al., 2024*]. There is a physiological adjustment in labor due to fetal and maternal pressure. Muscle tone and trauma are associated with the development of prolapse [*De Vita D, Giordano S., 2011*]. Prolapse in pregnancy cannot be eliminated in the postpartum period. There is an increase in the degree in the trimester of pregnancy as a result of the hormonal influence that manifests in softening of the cervix and pelvic tissue [*Taithongchai A, Robinson D, 2025, Arusi M et al., 2023*]. Pelvic organ prolapse can develop spontaneously in pregnancy. This can be caused by the development of the uterus that exceeds the pelvic organs since the second trimester. The uterus becomes an intra-abdominal organ and the fetus develops a protective factor for prolapse. During pregnancy, the grade of prolapsed may increase, persist, or get worse [*Rusavy Z et al., 2015*].

In the management of pelvic organ prolapse in pregnancy, the diagnostic procedure is very critical including the degree of prolapse because it

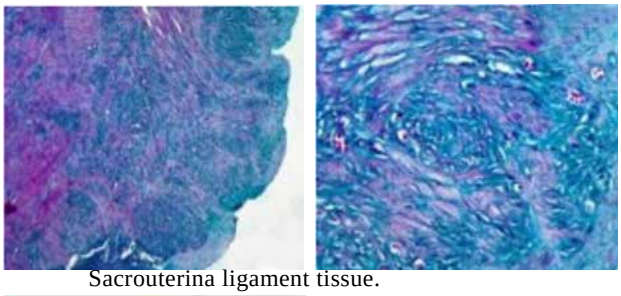

FIGURE 2. *Mason Trichrome painting on sacrouterina ligament tissue. POP patients. Comparison*

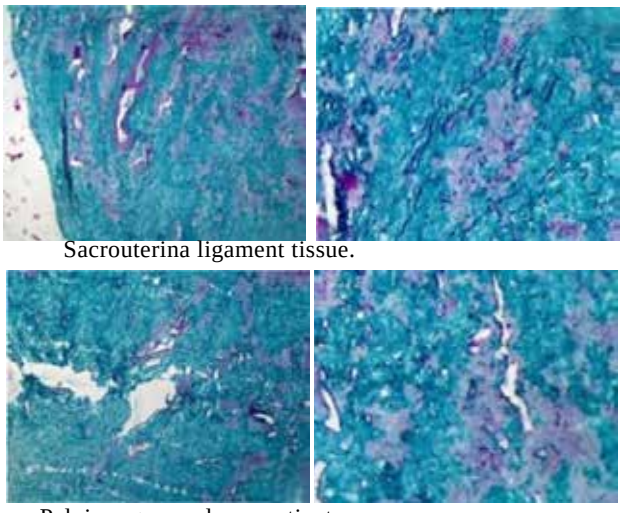

FIGURE 3. *Mason Trichrome Painting on vaginal wall tissue. POP Patients. Comparison*

requires different management. The difference in agnosis may be due to differences in examiners or progression of POP [*Vargas et al., 2022*]. The diagnosis of cervical lengthening is confirmed after a transvaginal ultrasound examination. In this case there was no delay in diagnosis [*Barbier Z et al., 2023, Zhang Y et al., 2025*]. In both cases, there were no serious complications. The effect of pelvic organ prolapse on pregnancies preceding pregnancy is thought to be associated with an increase in spontaneous abortion and preterm labor. The cervix that protrudes from the vaginal introitus can become edematous and is susceptible to a variety of mechanical trauma that can lead to ulcers and infection [*Zhang D, Li H et al., 2025*]. Complications of pelvic organ prolapse in pregnancy include cases of urogynecology and infection as well as the risk of maternal death. The presence of prolapse will be associated with a cervical failure to prepare for labor, the risk of rupture and prolonged labor [*Miyano et al, 2013*].

Women of reproductive age who suffer from prolapse and who are pregnant are multigravidas [*de Amorim AC et al, 2025, Sing R et al., 2021*]. The first case was the second pregnancy with a previous delivery of a spontaneous vaginal delivery with a birth weight of 3,500 grams. There was no maternity congestion from a previous history of labor, but there was a history of an episiotomy performed at the time of delivery. Trauma to the pelvic floor muscles and possible compression of the pudendal nerve were the main risk factors in this case, same as the first case, the second case was the third pregnancy with two previous maternal deaths. Vaginal delivery is the first delivery. The mother gives birth to a baby who has a birth weight of 3500 grams. Labor went well and smoothly, despite an episiotomy. In this second delivery, there was maternity congestion due to fetal malposition (occiput presentation), so an emergency caesarean section was performed because of this indication.

Management of delivery in this case was to do a caesarean section. Vaginal delivery in cases of pregnancy and uterine prolapse is still possible although management of uterine prolapse during labor must be carried out based on the degree of prolapse, gestational age, and parity [*Ba'Abbad L et al., 2023*]. However according to many literatures, elective caesarean section in the near future could be a safe choice of delivery [*Zeng C et al, 2018*]. Of the two cases we reported, both had a cesarean section. The first case was decided to have a primary cesarean section at 38/39 weeks of gestation, but at 36/37 weeks of gestation, adequate contractions appeared accompanied by abdominal pain without cervical dilation. This condition results in an emergency cesarean delivery to be performed. Abdominal labor considerations in this case are prolonged labor which may be due to cervical lengthening [*Sium AF et al., 2025]*. The abdominal pain that the patient feels may be an early sign of a complication of intra-partum pelvic organ prolapse into the uterus in the form of imminent uterine rupture. However, no abnormalities were found in the uterus during cesarean delivery. The second case was decided to undergo vaginal delivery, but there was premature rupture of membranes occurring more than 12 hours before without any signs of labor and this patient had a history of previous cesarean section, so the patient finally decided to do a cesarean section to deliver the baby.

Pelvic organ prolapse management therapy. In both cases we reported, conservative management and therapy during pregnancy were the main options. Both patients planned a postpartum evaluation to assess the degree of pelvic organ prolapse. Surgical correction will be determined based on the results of the postnatal evaluation . The first case did not show an increase in the degree of pelvic organ prolapse on the postpartum evaluation, even in this case a grade III rectocele was found. Cervical lengthening was still present in these patients. Corrective surgery is an option for these patients. The patient underwent posterior purandare and colporaphy surgery. Anterior colporaphy was not performed in this patient because the cystocele had improved after correction of uterine prolapse. In this patient, there was no corrective surgery for cervical lengthening with the consideration that the patient still wanted to get pregnant again. Meanwhile, the act of reducing the length of the cervix has the risk of causing cervical incompetence in subsequent pregnancies [*Obsa et al., 2022*]. The second case did not show an increase in pelvic organ prolapse on the postpartum evaluation. This patient did not complain of a lump coming out of the inside of the vagina or problems urinating. This patient felt incomplete after defecation, but did not

require surgical correction. Finally, the patient was decided to undergo conservative therapy in the form of pelvic floor muscle exercises. In the two patients we treated, we also advised against lifting heavy weights and adopting a high-fiber diet to reduce the likelihood of increased intra-abdominal pressure due to constipation.

CONCLUSION:

There is no standard protocol for treating pregnancies with uterine prolapse. Antenatal management in both cases was similar to normal pregnancies, with careful consideration of possible complications. The pregnancy outcome in both cases was good.

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