**Case Report: Pregnancy Associated Uterine Prolapse**

**Abstract**

Uterine prolapse that appears for the first time during pregnancy is a rarely encountered clinical entity, complicating 1 in 10,000 to 1 in 15,000 deliveries. A 30-year-old, gravida 3, para 2 woman with a 35-week-old pregnancy who was admitted to the study center was diagnosed with stage III C uterine prolapse according to the Pelvic Organ Prolapse Quantification System. Bed rest in the Trendelenburg position and administration of saline soaks for the reduction of cervical edema were recommended for the palliative treatment of the patient. Five weeks later, a healthy male baby with a birthweight of 3500 grams was delivered by cesarean section. Appropriate management of pregnancy-associated uterine prolapse consists of conservative treatment modalities throughout pregnancy.

**Keywords**

Pregnancy; Uterine Prolapse

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**Özet**

Gebelikte ortaya çıkan uterin prolapsus 10.000-15000 doğumda bir görülmektedir. 30 yaşında gravida 3, parı 2, 35 haftalık gebeliği mevcut olan hastada pelvik organ prolapse quantification (POP-Q) sisteme göre evre 3 C uterine prolapsus saptandı. Mevcut olan servikal ödemin azaltılması için Tradelenburg pozisyonunda istirahat ve serum fizyolojikle nemlendirme önerildi. 5 hafta sonra 3500 gr erkek bebek sezaryen seksiyo ile doğurtuldu. Gebeliğe bağlı uterin prolapsus olgularında gebeğin boyunca konservatif tedavi yaklaşımları önerilmektedir.

**Anahtar Kelimeler**

Gebelik; Uterin Prolapsus
Introduction

Uterine prolapse is defined as the descent of the uterus and/or cervix through the vaginal canal which is usually caused by defects within the supporting structures of the uterus and vagina. Uterine prolapse most commonly occurs in multiparous women as a result of the progression of vaginal delivery injuries within the endopelvic fascia (also consisting of the uterosacral and cardinal ligaments) and lacerations in the levator muscles and the perineal body. Additional factors which contribute to the development of uterine prolapse include systemic conditions (such as obesity, asthma, chronic bronchitis, and bronchiectasis) and local conditions including ascites, and large uterine and ovarian tumors [1].

Uterine prolapse that appears for the first time during pregnancy is a rarely encountered clinical entity, complicating 1 in 10000 to 1 in 15000 deliveries. It can occur acutely following a fall or trauma in nulliparous women, but it is more commonly seen in multiparous women with a history of prolapse before pregnancy [2]. This report describes a case of pregnancy-associated uterine prolapse that occurred in a 30-year-old multiparous woman.

Case Report

A 30-year-old, gravida 3, para 2 woman was admitted to the Department of Obstetrics and Gynecology in Siirt Women’s Health Hospital for a routine prenatal visit. It was determined that she had a 35-week-old pregnancy according to her last menstrual period. It was learned that she had begun to experience uterine prolapse during the fourth month of her pregnancy and that this condition worsened gradually. The patient stated that she did not follow a regular schedule of prenatal visits during her pregnancy. It was also learned that she had delivered a baby girl with a birthweight of 3200 grams eight years earlier and a baby boy with a birthweight of 3800 grams five years earlier through the vaginal route.

Rectovaginal examination revealed nothing particular except stage III C uterine prolapse. This report describes a case of pregnancy-associated uterine prolapse, based on the Pelvic Organ Prolapse Quantification System (POP-Q) (Figure 1). Obstetric ultrasonography demonstrated a living singleton fetus with biometrical measurements compatible with 35 weeks of gestation and a normal amniotic fluid index.

Both the patient and her husband were informed about the risks and possible outcome of this clinical condition. Although temporary treatment with a vaginal pessary was offered to the patient, she did not accept this with the rationale that she would be unable to use it. Since the couple no longer desired to have children, the written informed consent of the couple was obtained and an elective cesarean section was planned to avoid the maternal and fetal risks associated with uterine prolapse.

Therefore, bed rest in the Trendelenburg position and the administration of saline soaks for the reduction of cervical edema were recommended for the palliative treatment of the patient. Five weeks later, a healthy male baby with a birthweight of 3500 grams was delivered by cesarean section. The patient was discharged on the second day of hospitalization with an appointment for the surgical repair operation which would provide the definitive treatment for pelvic organ prolapse.

Discussion

It is well known that the pelvic floor support dramatically changes in nulliparous pregnant women when compared with nulliparous non-pregnant women. The most prominent anatomical alteration takes place in the length of the anterior wall and the perineal body, which may explain the common occurrence of urinary incontinence during pregnancy. The increase in the length of the perineal body may represent an adaptation mechanism which minimizes the risk of anal sphincter damage [3].

Approximately 43% of non-pregnant nulliparous women have stage 0 prolapse and 57% of them have stage 1 prolapse. In contrast, 10% of the pregnant nulliparous women have stage 0 prolapse, 43-46% of them have stage 1 prolapse, and 26-48% of them have stage 2 prolapse. These incidences are found to be similar for women who have delivered vaginally or by cesarean section. Thus, it can be suggested that being pregnant itself impairs pelvic floor support. However, it is well documented that the risk of uterine prolapse increases with the number of vaginal deliveries. When compared with a nulliparous woman, the risk of developing pelvic organ prolapse increases eightfold after two vaginal deliveries and this risk becomes twelve-fold after four vaginal deliveries [4, 5].

Maternal complications associated with pregnancy-related uterine prolapse include miscarriage, preterm labor, premature rupture of chorioamniotic membranes, urinary obstruction, cervical elongation, hypertrophy, and edema [6, 7].

Current management of pregnancy-associated uterine prolapse refers to bed rest in the Trendelenburg position, application of a indwelling urinary catheter in case of urinary obstruction, and administration of saline soaks to treat cervical edema. Once cervical edema has been reduced, the prolapse can usually be replaced by means of manual intervention and then a
Pessary may be inserted to prevent recurrence. After the procedure, antibiotic creams are often prescribed to diminish the risk of associated cervicitis. There is no valid evidence about the benefits of systemic antibiotic treatment. Pessary treatment is often required only until the fifth month of pregnancy when the uterus usually lifts out of the pelvis, and, as a result, the symptoms related with uterine prolapse are alleviated [2, 8]. Abnormalities of labor are observed more frequently in women with pregnancy-associated uterine prolapse. That is, the weakness of the pelvic floor and the accompanying cervical lacerations can lead to the precipitation of delivery. Moreover, uterine prolapse may cause cervical infection and bleeding which eventually lead to the scarring and fibrosis of cervical tissue. These alterations may result in secondary arrest of the cervical dilatation [8, 9]. It has been previously reported that spontaneous vaginal delivery is successfully achieved in 40% to 80% of the women with pregnancy-related uterine prolapse, but instrumental deliveries and deliveries by cesarean section occur with some frequency. Nevertheless, spontaneous vaginal delivery is recommended in affected women [7, 8].

If the uterine prolapse is left untreated, it will almost certainly recur in future pregnancies. Surgery provides the definitive cure, but the application of a vaginal pessary appears as a readily available therapeutic option during the time of genital involution after delivery. Longer term use of a pessary should be considered if more pregnancies are desired. The underlying motive is that the beneficial effects of a surgical repair are likely to be overwhelmed by another pregnancy and vaginal delivery. Another factor is that an elective cesarean section planned to avoid recurrent prolapse has its own risks [2, 10]. Obstetricians should keep in mind the fact that careful monitoring of the cervical dilatation rate is essential for the early detection of both cervical dystocia and labor abnormalities. Another issue to be remembered is that it would be more difficult to manage primary postpartum hemorrhage caused by uterine atony in women presenting with uterine prolapse during pregnancy because uterine prolapse can interfere with the effective application of manual uterine compression [8-10].

**Competing interests**
The authors declare that they have no competing interests.

**References**