

# Uterine Prolapse Complicating the 3<sup>rd</sup> Trimester of the Pregnancy: A Case Report

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Uterine prolapse is extremely rare during pregnancy. Prolapse etiology depends on many factors, such as advanced age, multiparity, difficult vaginal delivery and increased body mass index. This condition may be complicated by cervical desiccation and ulceration, preterm labor, obstructive labor and even maternal death. We report a case of uterine prolapse which developed during pregnancy. A 40-year-old woman gravida 5 para 4 with stage 3 uterine prolapse was admitted to hospital with pelvic pain and urinary tract infection at 35<sup>th</sup> week of the gestation. A cesarean section was performed at 38<sup>th</sup> week of the gestation because of profound cervical bleeding due to the edematous, ulcerated, desiccated cervix. Postnatally, the uterine prolapse spontaneously recovered. Uterine prolapse that occurs during the pregnancy should be managed using a conservative approach. It seems that severely desiccated cervix cause profound bleeding and cesarean delivery should be preferred.

**Key Words:** Uterine prolapse, Pregnancy, Cesarean

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## Introduction

Uterine prolapse during the pregnancy is a rarely seen condition with an estimated incidence of 1 per 10.000-15.000 deliveries. In the literature, approximately 250 cases of uterine prolapse during the pregnancy have been reported, 10 of which have been reported for the last decade and the rest before 1990, probably as a result of decreased parity.<sup>1-4</sup> Uterine prolapse that occurs during the pregnancy may be complicated by urinary tract infection, acute urinary retention, patient discomfort, cervical desiccation and ulceration, miscarriage, preterm labor and even maternal death.<sup>2</sup>

Here, we report a woman at 35<sup>th</sup> week of the gestation who was admitted to the hospital with the complaints of pelvic pain and urinary tract infection. After the administration of the medical treatment, she was discharged from the hospital, to which she re-presented with regular contractions at 38<sup>th</sup> week of the gestation. Although a spontaneous vaginal delivery was planned, a cesarean section was performed due to profound cervical bleeding.

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## Case Report

A 40-year-old woman gravida 5 with four spontaneous vaginal deliveries was referred to our outpatient clinic with pelvic pain and sever dysuria. Pelvic examination performed in dorsal lithotomy position revealed a stage 3 uterine prolapse according to the pelvic organ support quantification staging system. The uterine cervix was totally prolapsed, reductible, edematous and desiccated like parchment paper without any dilatation or effacement. Amniotic membranes were intact.

There was no history of macrosomic infants or obstructive labor. The prolapse has firstly occurred 2 weeks ago at 33<sup>th</sup> week of the gestation. Patient noted a sensation of heaviness, vaginal pain and a firm mass in the lower vagina. She was admitted to the hospital and diagnosed with uterine prolapse. She was hospitalized at 35<sup>th</sup> week of the gestation because of severe dysuria, pelvic pain and uterine prolapse. Among the laboratory analyses, complete blood count was normal, urinalysis had quite a lot leukocytes and *E. Coli* was isolated from the urine culture. While normal fetal heart rate pattern was observed using cardiotocography, cardiotocography did not show any uterine contraction. The cervical os was closed. Ultrasonographic evaluation determined a single fetus in vertex position with a fetal body weight of 2400 g. At the end of 3 day hospitalization with antibiotherapy and bed rest, her pain was relieved and she was discharged. The patient was instructed to visit weekly.

At 38<sup>th</sup> week of the gestation, she was presented with reg-

ular uterine contractions. In the pelvic examination, cervical dilatation was 1-2 cm and effacement was 30%. She was admitted to the hospital and labor follow-up started. Cervix was irreducible and extremely desiccated (Figure 1). Two hours after the admittance, profound vaginal bleeding started without any preceding pelvic examination or intervention to the cervix. Bleeding was attributed to desiccated and erode cervix after the examination and patient was informed about the situation. When cervical dilatation approached to 2-3 cm and effacement to 50%; bleeding exacerbated. Upon the occurrence of hypotension and tachycardia, cesarean section was performed and she gave birth to a female baby with a birth weight of 3060 g and with Apgar score 9 within the first minute. In early postpartum period, cervix and uterus returned to their normal position and no additional intervention was performed (Figure 2). Patient was discharged 2 days later with a good general health. A follow-up examination performed at 6 weeks did not reveal any evidence of uterine prolapse.



Figure 1: Irreducible and desiccated cervix at 38<sup>th</sup> week of the gestation



Figure 2: Early postpartum period, cervix and uterus in their normal position

## Discussion

Uterine prolapse is more frequently observed in the people with older age and its etiology is multifactorial. Its causal factors include multiparity, difficulties in the delivery, congenital tissue defects, genetic factors, increased intraabdominal pressure, pelvic neuropathies, extended labor, macrosomic baby and pelvic trauma.<sup>5</sup> Risk for prolapse is increased by four-fold in a woman with two vaginal deliveries compared to a nulliparous woman.<sup>6</sup> In the literature, many cases include multiparous women with pre-existing prolapse. Our case was a very rare case of uterine prolapse that developed during the pregnancy.<sup>7-11</sup>

Uterine prolapse observed during the pregnancy manifests with urinary tract infections and obstructions, cervical desiccation, cervical bleeding and infection. Cervical laceration, inability to dilate the cervix, obstructive delivery, uterine rupture and sepsis are among the complications reported during and after the labor.<sup>2</sup> In the literature, the unique previous case report had occurred due to the sepsis.<sup>1</sup>

Management options for uterine prolapse observed during the pregnancy have slightly varied over the years. Conservative management includes the prevention of cervical trauma/desiccation with bed rest in trendelenburg position. Some authors recommended a topical magnesium solution to prevent the laceration and edema of the cervix.<sup>12</sup> Vaginal pessaries have been used, but they frequently fell out.<sup>2</sup> It was reported that, if conservative solutions failed, laparoscopic modified Gilliam suspension was used during the early pregnancy.<sup>13</sup>

For the women with uterine prolapsed, the decision about the type of delivery is made depending on the prolapse severity and patient's choice. Although operative vaginal delivery with forceps or hysterostomy were recommended, these modalities have been reported to lead to the stretching of the lower segment to an extent to cause uterine rupture due to the cervical dystocia.<sup>1</sup> In regard of these findings, delivery by cesarean section becomes the safest choice for a woman with a thick, edematous, irreducible cervix, as seen in our case.<sup>8</sup> In many cases, prolapse reappears or recurs after postpartum period. Cesarean hysterectomy with suspension of the vaginal cuff to the pelvic periosteum may be an option for woman who don't plan to have another baby later on.<sup>3</sup> In our case, a cesarean section was performed because of the profound bleeding due to the desiccated cervix and as a result of the complete resolution of the cervical prolapsed, no intervention was performed.

Uterine prolapse observed during the pregnancy is a rare gynecological condition and no guideline has been published for its management to date. The decision about the treatment

modality to be administered is made depending on gestation, prolapse severity and patient's preference. Although our case doesn't present the risk factors for uterine prolapse, it happened during the pregnancy for the first time, due to desiccated cervix that induced over-bleeding resulting to cesarean section and, consequently, spontaneous relief made this case different from other cases presented in the literature.

### Üçüncü Trimester Hamilelikte Uterin Prolapse Komplikasyonu: Olgu Sunumu

Uterin prolapsus gebelikte son derece nadir görülen bir durumdur. Prolapsus etyolojisi ileri yaş, multipartite, zor vajinal doğum ve artmış vücut kitle indeksi gibi çok çeşitli faktörlere bağlanmaktadır. Bu durumun servikste kuruma ve ülserasyona, erken veya zor doğuma ve hatta maternal ölüme sebep olabileceği bildirilmiştir. Bu vaka sunumunda gebelikte oluşan bir uterin prolapsus vakasını sunmayı hedefledik. 40 yaşında, 5 gebeliği, 4 doğumu ve uterin prolapsusu olan hasta, gebeliğinin 35. haftasında pelvik ağrı ve üriner sistem enfeksiyonu nedeniyle hastaneye başvurdu. Gebeliğin 38. haftasında doğum eylemi sırasında; ödemli, ülser ve kuru serviks nedeniyle gelişen aşırı servikal kanama nedeniyle sezaryen ile doğum yaptı. Doğum sonrası uterin prolapsusu spontan olarak düzeldi. Gebelikte oluşan uterin prolapsus konservatif yaklaşımla takip edilebilir. Kuruyan ve ülser olan serviks dilatasyon sırasında şiddetli kanamaya sebep olarak doğum yöntemi olarak sezaryenin tercih edilmesine neden olabilir.

**Anahtar Kelimeler:** Uterin prolapsus, Gebelik, Sezaryen

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