

Cervical prolapse and concomitant uterine anomaly at term pregnancy: A case report

Yasemin CEKMEZ (*), Necdet SÜER (**), Halenur BOZDAĞ (**), Güneş GÜNDÜZ (**)

SUMMARY

Uterine anomalies and cervical prolapse in pregnancy are two rare clinical conditions. A 39-year old pregnant woman admitted to the hospital with premature rupture of the membranes during labor at 38 weeks of gestation and a concomitant maternal mullerian duct anomaly and cervical prolapse. We determined an edematous, partially ulcerated and hardly reducing cervix on pelvic examination. Sonographic examination revealed an enlarged uterus carrying the fetoplacental units in the left compartment and the right compartment of the uterus seemed like an heterogeneous mass. Because of cervical prolapse and onset of bleeding, cesarean section was performed. She was discharged on the postoperative 4. day without any complication, and partial resolution of the cervical prolapse.

Key words: Uterine anomaly, cervical prolapse, pregnancy

ÖZET

Üterin anomalisi olan term gebelikte servikal prolapsus: Olgu sunumu

Gebelikte servikal prolapsus ve uterus anomalisi nadir görülen iki klinik durumdur. Servikal prolapsusu ve müllerien kanal anomalisi olan 39 yaşındaki hasta erken membran rüptürü nedeniyle hastanemize 38. gebelik haftasında başvurdu. Pelvik muayenede ödemi, parsiyel olarak ülsere olan ve redüksiyonu tam olmayan serviks saptandı. Ultrasonografik incelemede sol tarafında gebelik ürünlerini taşıyan sol tarafı ise heterojen kitle gibi görünen büyümüş bir uterus izlendi. Servikal prolapsus varlığı ve vajinal kanama saptanması nedeniyle sezeryan planlandı. Postop 4. gününde parsiyel servikal rezolüsyonu olan hasta komplikasyonsuz olarak taburcu edildi.

Anahtar kelimeler: Üterin anomalisi; servikal prolapsus, gebelik

INTRODUCTION

Uterine anomalies and cervical prolapse in pregnancy are two rare clinical conditions. Early recognition is essential for these diseases in order to avoid possible maternal and fetal risks. Incidence rate for cervical prolapse during pregnancy is 1 per 10000-15.000 deliveries ⁽¹⁾. Uterine anomalies are estimated to occur in 0.1-0.5 % of women but its true prevalence is unknown because anomalies are usually discovered in patients presenting with infertility ⁽²⁾. In this case we reported a pregnant woman with cervical prolapse and a concomitant uterine anomaly.

CASE

A 39-year old pregnant woman (gravida:4, parity:2, abortus:1) admitted to the hospital with premature rupture of the membranes during labor at 38 weeks of gestation and a concomitant maternal uterine anomaly (uterus bicaruate unicollis).

She had no history of prolapse before the third trimester of her pregnancy. She had an abortus 6 months ago due to an uterine anomaly, and two uncomplicated spontaneous vaginal deliveries at term. Birth weights of newborns were within normal range. She didn't mention any previous incident of pelvic trauma, prolapse or any stress incontinence during or before this pregnancy.

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Sami Ulus Medical and Research Hospital, Department of, Obstretic and Gynecology*; Göztepe Medical and Research Hospital, Department of, Obstretic and Gynecology**

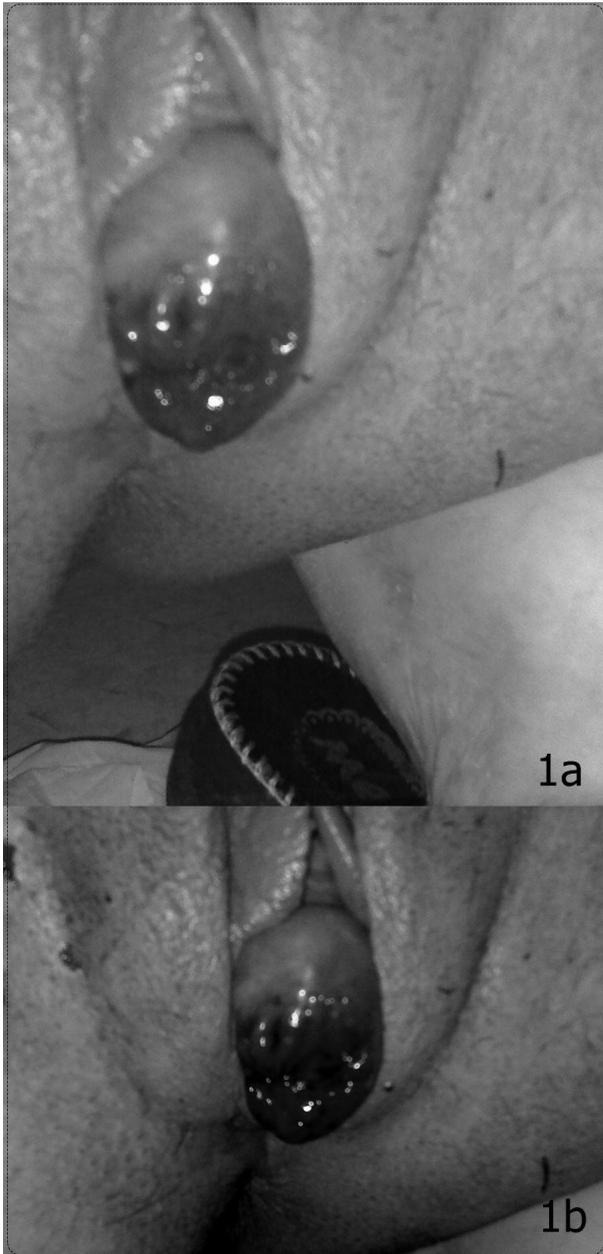


Figure 1a-1b. Before delivery (cervix was ulcerated and hardly reducing), Postop 3. day prolaps determined only with valsalva maneuver at standing.

In pelvic examination we determined an edematous, partially ulcerated and hardly reducing cervix with 2 cm cervical dilatation and 30 % effacement (Figure 1a). The degree of prolapse was grade 3 according to the POP-Q classification (Figure 2) ⁽³⁾. Sonographic examination revealed an enlarged uterus carrying the baby in the left compartment. Right compartment of the uterus was seem like an heterogenous mass neighbouring the gestational cavity due to the enlarged left horn. The biometric dimensions of the baby was 6 weeks smaller than its gestational weeks that was estimated according to Nagele's rule and relative to the first trimester ultrasonographic dimentions of the embriyo.

When cervical dilatation approached to 3 cm and effacement to % 50; bleeding began. Upon development of hypotension and tachycardia the patient was informed about the situation and cesarean section was performed. The patient was warned about the recurrence risk of the condition and offered tubal ligation during cesarean section. But she didn't give permission for tubal ligation. A live female infant weighing 2810 gr was delivered. Bicornuate unicollis was confirmed upon cesarean section. She was informed about contraceptive methods and discharged 4 days later with partial resolution of the cervical prolapse (Figure 1b). A follow-up examination performed at 10 weeks didn't reveal any evidence of uterine prolapse.

DISCUSSION

Uterine prolapse is a rare complication of pregnancy ⁽⁴⁾. There are well known risk factors for pelvic or-

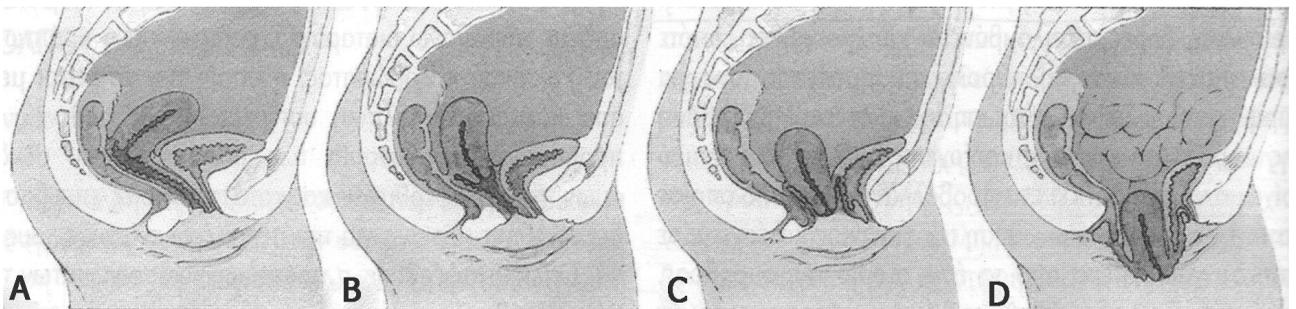


Figure 2. Degrees of uterine prolapse. A:normal position of the uterus, B:first degree prolapse, C:second degree prolapse and D:third degree prolapse.

gan prolapse: traumatic and prolonged labor and operative vaginal deliveries, the conditions that increase intraabdominal pressure chronically, smoking, genetic factors, prior surgery, collagen abnormalities⁽⁵⁾. The main cause of the uterus and the vaginal vault prolapse is failure of supportive ligaments of the uterus such as Mackenrodt or cardinal ligaments⁽⁶⁾. Often the reason of the pelvic organ prolapse is a combination of these etiologic factors.

Pregnancy complicated with cervical prolapse can induce vascular congestion of the cervix. This vascular incompetence and concomitant edema give rise to anoxia. This is the reason for higher incidence of spontaneous abortions in these cases⁽⁷⁾. Our patient had a first trimester spontaneous abortion one year ago and IUGR was revealed in this pregnancy due to the uterine anomalies.

Uterine anomalies are uncommon but often treatable cause of infertility^(7,8). Simon et al found that in the healthy fertile population, uterine anomalies have a prevalence of 3.2 %⁽²⁾. Patients with uterine anomalies are known to have higher first trimester spontaneous abortions, fetal intrauterine growth restriction, fetal malposition, preterm labor and retained placenta⁽⁹⁾.

Uterine anomalies are categorized commonly in 7 classes according to the American Fertility Society (AFS) Classification scheme⁽¹⁰⁾. There was a class IV anomaly (bicornuate uterus) in our patient that justified caesarian section. A bicornuate uterus results from partial nonfusion of the müllerian ducts. The central myometrium may extend to the level of the internal cervical os seen in our patient (bicornuate unicollis) or external cervical os (bicornuate bicollis)⁽¹⁰⁾. Some patients are surgical candidates for metroplasty for the treatment of infertility. In our case there was no need to add a metroplastic correction of uterus to the classic cesarean section.

The decision about the type of delivery for women with uterine prolapse depends on the severity of the prolapse 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⁽¹¹⁾. In regard of these findings, delivery by cesarean section becomes the safest choice for a woman with thick, edematous, hardly reducing cervix as seen in our case⁽¹²⁾. In many cases, prolapse reappears or recurs after postpartum period. Cesarean hysterectomy with suspension of vaginal cuff to the pelvic periosteum may be an option for woman who don't plan to have another baby later on⁽¹³⁾. In our case cesarean section was performed due to the profound bleeding with resultant complete resolution of the cervical prolapse

Management of antenatal cervical prolapsus is often achieved conservatively. Genital hygiene and bed rest during antenatal period can ensure a successful pregnancy outcome⁽¹⁴⁾. In 1949 Klawans and Kanter⁽¹⁵⁾ advised continual use of the Smith-Hodge pessary throughout the latter part of pregnancy for women with late occurrence of prolapse, followed by bed rest for the duration of the pregnancy if pessary failed to maintain support.

In conclusion both uterine anomaly or cervical prolapse in pregnancy are two rare clinical conditions that coexisted in our case. While no guideline has been published for cervical prolapse management, the decision about the treatment modality to be administered is made depending on the condition of pregnancy, severity of the prolapse and patient's preference.

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