# **Olgu Sunumu /** *Case Report*

# Uterine Rupture with Misoprostol at 19 Week of Gestation

Ondokuz Hafta Gebelikte Misoprostol Kullanımına Bağlı Uterus Rüptürü

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Özet

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#### Abstract

Amac: Sentetik prostaglandin E1 analoğu olan misoprostol, gastrik ülser tedavisi için onay almış olmasına rağmen kadın hastalıkları ve doğum pratiğinde birinci ve ikinci trimester gebelikleri sonlandırmada, term gebeliklerde doğum indüksiyonunda ve postpartum kanamaların yönetiminde sık olarak kullanılmaktadır. Misoprostolün güvenilirliği, yaygın kullanılması ve tedavide etkin olmasına rağmen geçirilmiş sezaryen öyküsü olan hastalarda artan uterus rüptürü nedeniyle sorgulanmaktadır.

Materyal ve Metod: Olgu sunumunda, ölü fetus tanısı ile gebelik terninasyonu planlanan 19 haftalık gebeliği bulunan, geçirilmiş alt segment sezaryen ve myomektomi öyküsü olan hastada misoprostol kullanımı sonrası ortaya çıkan uterus rüptürünü sunacağız.

Bulgular: Misoprostol kullanımı sonrası hastada uterus rüptürü meydana gelmiş, hasta acil olarak ameliyata alınıp kanama durdurulmuş ve rüptür hattı onarılmıştır

Sonuç: Geçirilmiş uterus cerrahisi öyküsü olan gebelerde misoprostol kullanımı ile uterus rüptürü riski artmakta olup Misoprostol, daha dikkatli kullanılmalıdır.

Anahtar Kelimeler: Misoprostol, gebelik, uterus rüptürü

Objective: Misoprostol is a synthetic prostaglandin E1 analogue that has been used commonly at obstetric practice even though received approval as an oral agent for the preventing of gastric ulcers. Its' widely used at obstetric practice such as first and second trimester pregnancy termination, labor induction at term and management of postpartum hemorrhage. Even though its' efficacy and widespread use, its safety is questioned in women with prior caesarean birth by the reason of increasing number of uterine rupture.

Materials and method: We report a second trimester pregnant women with demised fetus with the history of myomectomy and prior low segment caesarean section who had uterine rupture after misoprostol administration.

Results: Because of uterine rupture, we performed emergency laparotomy and repaired the rupture line

Conclusion: Misoprostol has to be used more careful at patients with prior uterine surgery do to the increased uterine rupture risk.

orally (200 µgr) and vaginally (200 µgr)

concomitantly. Afterwards uterine contractions

were started and become more often and

efficient in the course of time. Vaginal bleeding

abdominal contractions were ended suddenly

and the patient had no more complaint of

abdominal discomfort despite continuing to the

misoprostol regimen. Abdominal sonography

was performed with suspicion of uterine

rupture and demised fetus floating into the

Approximately a 5 cm rupture line was seen on

the prior cesarean scar (figure 2). Mini

laparotomy was performed immediately and

uterine rupture line was repaired. She did not required blood transfusion and was discharged

observed

During follow-up,

(figure

Keywords: Misoprostol, pregnancy, uterine rupture

was added on later.

was

on the second postoperative day.

### **Case Report**

A 42-year-old pregnant woman was referred to our obstetric department with the diagnosis of intrauterine death at 16 weeks of gestation. This was her second pregnancy. She had the history of a low segment cesarean section concurrently with anterior wall myomectomy. A 16 week and five days (biparietal diameter) demised fetus was observed at sonographic examination. Amniotic fluid was normal and the cervical length was measured 35 mm without any funneling. On her physical examination, blood pressure was 100/70 mmHg and heart rate was 80 beat per minute. Whole blood count, liver function test, urea and creatinine and D- Dimer were counted normal. Bishop score was noted four.

A total of 400 µgr misoprostol (Cytotec, G.D. Searle & Co, Chicago, IL, USA) was administered

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Figure 1. Fetus floating into the abdomen



Figure 2. Uterine rupture line at prior cesarean section area

# Discussion

Misoprostol is a synthetic prostaglandin E1 analogue that was approved for the treatment of gastric ulcer however it has been used at obstetrics and gynecology with a wide variety of indications (1, 2, 3). Because of its low cost, high effectiveness and lower side effects, it has been widely used at medical abortion. However standard application dose and dose interval of misoprostol at medical abortion is not certain. Although misoprostol is feasible and safe, uterine rupture which is getting more common due to the increasing number of cesarean sections may be life threatening therefore careful administration of misoprostol is recommended at patients with prior uterine surgery.

In a retrospective study with Nucatola et al. uterine rupture was occurred at three patients (0.45/1000) after the use of misoprostol at second trimester pregnancy terminations however none of them has the history of prior cesarean section(2). Similarly, Fawzy et al evaluated the safety of misoprostol at patients with three or more prior cesarean sections and reported that vaginal misoprostol appears to be a safe and effective agent for second trimester pregnancy termination at patents with three or more prior cesarean delivery (4). On the other hand, Güleç et al recommended that misoprostol should be used carefully at patients with one or more prior cesarean sections (5). Also, in literature there are many case reports about uterine rupture at patients with prior surgery after using misoprostol (6, 7, 8)

In our study, the patient had prior surgery; a myomectomy and a cesarean section concomitantly and uterine rupture was occurred with low dose misoprostol. In conclusion, misoprostol have to be used carefully at patients with prior uterine surgery.

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