

Methotrexate Treatment in Cornual Ectopic Pregnancy; A Case Report

Kornual Ektopik Gebelikte Methotrexate Tedavisi; Olgu Sunumu

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ABSTRACT

Cornual ectopic pregnancy is a rare ectopic pregnancy (0,4-0,6%) with a high mortality rate (2-5%). It has high mortality rate when you are diagnosed late. Therefore early diagnosis and treatment considerably reduce mortality and morbidity. In the literature, it has been shown that methotrexate (Mtx) as a medical treatment removes the need for surgical treatment in some cases. A 31-year-old gravida 3, para 2 woman presented with vaginal bleeding and pelvic pain. The patient was at the 6th week of pregnancy. A hypoechoic mass had the appearance in the size of 24x13 mm in the proximal part of the right tuba uterine on ultrasonographic examination (Cornual Ectopic Pregnancy). We decided perform methotrexate to the patient according to Mtx treatment protocol (50 mg/m²) and we did diagnostic curettage at the same time. The level of β -hCG was measured as 0 in the test after 6 weeks. We didn't see any complication after Mtx treatment and curettage. The patient was removed from follow up. We want to present this rare case and contribute to the literature.

Key Words: Cornual; ectopic pregnancy; methotrexate

ÖZET

Kornual ektopik gebelik, yüksek mortalite oranına sahip (%2-5) nadir görülen bir ektopik gebelik tipidir (%0,4-0,6). Geç tanı konulduğunda yüksek mortalite oranına sahiptir. Erken tanı ve tedavi mortalite ve morbiditeyi önemli ölçüde azaltmaktadır. Literatürde, medikal tedavi olarak methotrexat'ın (Mtx) bazı durumlarda cerrahi tedavi ihtiyacını ortadan kaldırdığı gösterilmiştir. 31 yaşında, kadın hasta (G3, P2, A0) vajinal kanama ve pelvik ağrı ile şikayetleri ile tarafımıza başvurmuştu. 6 haftalık gebeliği vardı. Ultrasonografik muayenede sağ tuba uterinanın proksimal kısmında 24x13 mm boyutlarında hipoekoik kitle izlendi (kornual ektopik gebelik). Hastaya tarafımızca Mtx tedavi protokolüne (50 mg/m²) göre Mtx yapıldı ve aynı zamanda tanısal küretaj işlemi uygulandı. β -HCG seviyesi 6 hafta sonra 0 olarak ölçüldü. Olgu takipten çıkarıldı. MTX tedavisi ve küretaj sonrası herhangi bir komplikasyon gözlenmedi. Bu nadir vakayı sunmak ve literatüre katkıda bulunmak istiyoruz.

Anahtar Kelimeler: Kornual; ektopik gebelik; metotrexat

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Ectopic pregnancy is seen in 1-2% of all pregnancies. Cornual pregnancy is the rare type of tubal ectopic pregnancies and seen in 1-2%.¹ Maternal mortality is 2-5%, therefore an important clinical condition.²

There are several reasons why the mortality rate in cornual pregnancies is high. The cornual region has high vascularization and dense muscle structure. So the gestational sac may grow bigger. High vascularization cause severe bleeding in case of rupture. With the advancing imaging methods diagnosis can be made earlier in nowadays. Approximately 80% of these pregnancies can be detected without rupture.³

As can be understood from the above ratios, cornual pregnancy; is a rare type in ectopic pregnancies. The mother's life has been at risk because of severe bleeding if the not diagnosed early. We want to present our rare case of cornual ectopic pregnancy.

CASE REPORT

A 31-year-old gravida 3, para 2 woman presented with vaginal bleeding and pelvic pain. The patient was at the 6th week of pregnancy. The general physical examination of the patient was normal and hemodynamic parameters were stable. There was no sensitivity, no defenses, rebounds on his abdominal examination. Active vaginal bleeding and cervical dilatation not revealed on pelvic examination. Level of β -hCG-423 mIU/ml, hemoglobin (Hb)-7.4 gr/dl and hematocrit (Htc)-26.6%. A hypoechoic mass had the appearance in the dimensions of 24x13 mm in the proximal part of the right tuba uterine on ultrasonographic examination (Cornual Ectopic Pregnancy). The patient was hospitalized with the diagnosis of Cornual Ectopic Pregnancy and the methotrexate (Mtx) treatment was planned. Mtx was performed according to Mtx treatment protocol (50 mg/m²) and we did diagnostic curettage at the same time. Material was sent to pathology. The level of β -hCG was 122 mIU/ml after Mtx treatment and the level of β -hCG was 30 mIU/ml after 4 day. The pathologic material was reported as decidual tissue containing necrosis and

bleeding sites. The level of β -hCG was measured as 0 mIU/ml after 6 weeks. The pathological appearance was not observed on ultrasonography (USG). The patient was removed from follow up.

DISCUSSION

Ectopic pregnancy is one of the most important causes of morbidity and mortality in women. Ectopic pregnancy is most commonly localized in the ampulla region of the tuba uterina. Cornual pregnancy is the rare type of tubal ectopic pregnancies and seen in 1-2%.⁴ Cornual pregnancy; the diagnosis and treatment of which can be quite difficult, is a type of ectopic pregnancy with higher morbidity and mortality than other settlements. Morbidity and mortality rates are increasing if when diagnosed late. The detailed ultrasonographic examination and close monitoring of β -hCG measurements allow cornual ectopic pregnancy to be recognized earlier. In this case, the patients can be diagnosed in the early period without developing rupture. To diagnose the cornual ectopic pregnancy is difficult when the operator is not experienced. Timor-Tritsch et al. described three diagnostic criteria for cornual pregnancy. These criteria are; an empty uterine cavity, a gestational sac located eccentrically and 1 cm from the most lateral wall of the uterine cavity, a thin myometrial layer surrounding the gestational sac.⁵ Our patient had these 3 criteria.

The diagnosis of cornual pregnancies is most of the time difficult with USG. Magnetic resonance imaging planning may be helpful in order to make both the diagnosis clearer and to determine the uterine anatomy more precisely. When the not detailed examination the diagnosis of cornual pregnancy will be late, and this reason rupture is inevitable.

Treatment (medical or surgery) of cornual pregnancies depends the uterine is ruptured or not. More radical procedures such as hysterectomy or cornual resection are performed in uterine rupture cases, whereas conservative methods are preferred in cases where rupture has not developed. Nowadays, the laparoscopic approach is more preferred

in ruptured cases. The cornual resection, cornuostomy, salpingostomy or salpingectomy can be performed by laparoscopically. There are many publications about the success of alternative methods such as multiple dose systemic Mtx therapy, vacuum aspiration combination with hysteroscopy.⁶ The injection of potassium or local Mtx can be preference in cornual ectopic focus with by USG guide, and also the other choice is selective uterine artery embolization.^{7,8} The advantage of conservative treatment methods is the protection of the fertility of the patient.

There was no uterine rupture in our patient and also the patient's hemodynamic was stable.

In such cases, the protection of the women fertility was also important. For this reason, we preferred Mtx therapy as a conservative approach for protection of patient fertility. The level of β -hCG was measured as 0 in the test after 6 week. In this case, we experienced the efficacy of Mtx therapy in the case of cornual ectopic pregnancy.

As a result, conservative approaches should be preferred if the patient hasn't uterine rupture and hemodynamic instability. The efficacy of Mtx treatment is high and the results of the treatment are satisfactory. This treatment should be preferred as the first option in appropriate cases.

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