Ectopic pregnancy is the most common cause of morbidity and mortality in the first trimester (1). Interstitial pregnancy is one of the rarest form of ectopic pregnancies that constitutes of 2-4% of ectopic pregnancies (2). Mortality rate is seven fold higher than other forms of ectopic pregnancies that constitutes of 2-4% of ectopic pregnancies. In this paper, we discussed the case of the interstitial pregnancy that successfully treated with systemic Methotrexate without requiring operation. Serial β-hCG were regressed without any need to further manipulations including operation. According to our clinical experience, in cases of interstitial pregnancies that hemodynamically stabilized and not having severe abdominal nor pelvic pain, systemic MTX treatment could be applied under serial USG and β-hCG follow-ups, that contribute low morbidity and mortality rates and lesser requirement to surgical approach.

Keywords: Ectopic pregnancy, interstitial pregnancy, Methotrexate

CASE REPORT

Gravida 4, parity 2, living 2, abortus 1; 39 year old pregnant attended to emergency service with the complaint of vaginal hemorrhage, amount of 2-3 peds. She was 9-weeked pregnant according to her last menstrual period. β-hCG was 2541. The transvaginal ultrasound revealed 32.6 mm gestational sac that situated in the myometrium of uterine fundus. Fetal heart activation was not revealed. Endometrial thickness was measured as 7 mm. She did not have abdominal and pelvic pain. She did not have the risk factors for interstitial pregnancy.
such as history of ectopic pregnancy, cesarean, in vitro fertilization or pelvic surgery.

The patient was internalized for β-hCG follow-up and systemic MTX treatment. Intramuscular 50 mg/m2 MTX was administered at first and fourth days of treatment. Follow-up was done with serial β-hCG and ultrasound measurements as shown on Table 1.

<table>
<thead>
<tr>
<th>Date</th>
<th>β-hCG</th>
</tr>
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<tbody>
<tr>
<td>19 07 2012</td>
<td>2541</td>
</tr>
<tr>
<td>21 07 2012</td>
<td>968</td>
</tr>
<tr>
<td>27 07 2012</td>
<td>603</td>
</tr>
<tr>
<td>28 07 2012</td>
<td>513</td>
</tr>
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<td>10 08 2012</td>
<td>50</td>
</tr>
<tr>
<td>30 08 2012</td>
<td>&lt;1.0</td>
</tr>
</tbody>
</table>

At the end of seventh day transvaginal ultrasound revealed 10 mm ectopic mass localized in the myometrium of uterine fundus. Her complaints and serial β-hCG were regressed without any need to further manipulations including operation.

**DISCUSSION**

Detecting interstitial pregnancy is more difficult than revealing other ectopic pregnancy types, since the gestational sac, located in the myometrium, is isolated from other pelvic organs, so it presents itself as grave hemorrhage leading to hypovolemic shock resulting from rupture of uterus rather than localized pelvic pain as seen in other types.

By the help of expansive use of sensitive β-hCG and TV USG, it is getting easier to diagnose interstitial pregnancy before facing to its complications. Hence, it makes possible to treat interstitial ectopic pregnancy without operation, with sole MTX medication.

In TV-USG, incomplete or asymmetrical myometrium surrounding eccentric located gestational sac sign is a unique diagnostic finding for interstitial pregnancy (7).

Treatment of interstitial pregnancy constitutes of wide range and variety of medical treatment to surgical operations such as cornual resection. Also injection of MTX, potassium chloride to the sac with laparoscopy and hysteroscopy guided with USG is an alternative method in treatment of interstitial pregnancy (8).

Systemic MTX medication is widely used in the treatment of ectopic pregnancies, on the other hand in the literature on interstitial pregnancy there is not enough experience on the usage of systemic MTX.

Dilbaz et al. presented a review that conserving three successfully treated cases with single dose of 50 mg/m2 systemic MTX, which was represented as an alternative treatment to surgical resection (9).

Another example for systemic MTX treatment in interstitial pregnancy was represented by Balsak et al. with the dose of 50 mg/m2 applied once a week for two weeks (10).

As introduced above in our case we applied two doses of 50mg/m2 MTX in the treatment of first and fourth days, which successfully managed and regression of the sac and β-hCG values were obtained.

In conclusion according our knowledge and clinical experience, in the cases of interstitial pregnancies that hemodynamically stabilized and not having severe abdominal nor pelvic pain, systemic MTX treatment could be applied under serial USG and β-hCG follow-ups, that contribute low morbidity and mortality rates and lesser requirement to surgical approach.

**REFERENCES**

1. Anon, Ectopic pregnancies: United States, 1990-


