**Ectopic Pregnancy at 13-week Period of Gestation with Live Fetus**

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**Abstract**

Ectopic pregnancy will unavoidably result in abortion or rupture. Ultrasound examination and β-hcg measurement are required, regarding symptomatic women with positive pregnancy test, in order to early detect cases of ectopic pregnancy. Here we report a case of a woman presented to the emergency department with acute abdomen and hemodynamic instability. History revealed a period of amenorrhea of 13 weeks and pregnancy test was found positive. Sonographic examination showed left adnexal swelling with viable fetus inside, hemoperitoneum and thus immediate laparotomy was decided. Left salpingo-oophorectomy was performed and post-operative course of the patient was uneventful. According to this case, ectopic pregnancy should not be eliminated from differential diagnosis when it comes to pregnant women with relevant clinical presentation, even in advanced gestational age.

**Key words:** ectopic pregnancy, advanced ectopic pregnancy, second trimester, acute abdomen, obstetric emergency

**Introduction**

The incidence of ectopic pregnancy in the general population is about 2%¹. Ectopic pregnancy is a major life-threatening condition during early stages of pregnancy which result in significant maternal morbidity². Fallopian tube is the site where the vast majority of ectopic pregnancies are implanted³. Most of the tubal ectopic pregnancies are diagnosed between 6-10 weeks of gestation⁴. However, in some rare cases, ectopic pregnancy may be carried up to an advanced gestational age. We hereby report a case of a spontaneous tubal pregnancy with live fetus ruptured at 13th week of gestation and how the patient was managed.

**Case report**

A 31-year-old nulliparous woman attended to our department with sudden onset of acute lower abdominal pain that started before 8 hours. Medical history revealed a period of amenorrhea of 13 weeks before which her menstrual cycle was regular. General examination revealed hemodynamic instability; her blood pressure was 80/50 mm Hg and
pulse rate was 145bpm, the patient was also pale and irritable. On abdominal examination, left iliac fossa tenderness, rigidity, and rebound tenderness were elicited. Bimanual examination revealed cervical motion tenderness, slightly enlarged uterus and a left adnexal mass.

On investigating, patient’s hemoglobin was 8.5 g/dL, hematocrit value was 28%, blood group was 0 positive, serum β-hcg was 80427,9 mIU/mL, with normal coagulation profile, liver and kidney function tests.

Accordingly, transvaginal ultrasonography revealed massive pelvic fluid collection, uterus with empty cavity and endometrial thickness of 20mm. Gestational sac was seen in left adnexa, with live fetus of gestational age 13 weeks’ with fetal heart rate of 164 bpm (Figure 1). Thus, the diagnosis of ectopic pregnancy was confirmed.

**Figure 1.** Ultrasound finding of ectopic pregnancy of 13 weeks gestational age-Fetal heart rate recorded via transvaginal ultrasonography.

**Figure 2.** Peroperative finding shows a tubal pregnancy with adherent ovary.

**Figure 3.** Left Adnexa with placenta and fetus of 13 weeks of gestational age.
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Patient was taken up for exploratory laparotomy after obtaining informed consent. Emergency laparotomy revealed hemoperitoneum, a left sided mass, with tubal rupture through which trophoblastic tissue protruded, with adherent left ovary (Figure 2). Left sided salpingo-oophorectomy was done, peritoneal washing was performed repeatedly and an intra-peritoneal drain was left. The patient received 2 units of packed RBC’s and 1 unit of fresh frozen plasma intra-operatively. Histopathology of the specimen (Figure 3) showed a ruptured ectopic gestation located at fimbria-ovarian junction with a male fetus measuring 6 cm crown to rump length.

Post-operatively, the patient was strictly followed up, she received 1 unit of packed RBC’s and her vital signs were shortly improved. The intra-peritoneal drain was removed two days later and she was discharged on postoperative day 5.

Discussion

Ectopic pregnancy is a usual yet serious problem with a significant morbidity and mortality rate during first trimester of pregnancy6. Although, second trimester ectopic pregnancy is rare among ectopic pregnancies6. In order to early identify cases of ectopic pregnancy, transvaginal ultrasonography and measurement of serum β-hcg levels should be performed, regarding patients with first trimester bleeding or pain attending an emergency department5. The vast majority of ectopic pregnancies necessitated emergency surgical management and lead to major complications, when diagnosed in an advanced gestational age5. Review of the literature revealed a case from Nkwabong and colleagues, who reported an ectopic pregnancy of 26 gestational weeks which was false diagnosed as intrauterine pregnancy with dead fetus after unsuccessful attempts of labor induction6. Hence, when ectopic pregnancy is diagnosed in a late stage, surgical treatment with laparotomy is inevitable and salpingo-oophorectomy is performed in most cases. Due to rarity of cases, it is important to identify and report late stage ectopic pregnancies and their therapeutic management.

Consent

Informed consent was obtained.

Conflicts

The authors declare no conflicts of interest.

Authors’ contribution

Konstantinos Zacharis wrote the first draft. Stavros Kravvaritis, Theodoros Charitos and Anastasia Fouka critically reviewed and amended the draft. All authors approved of the final draft.

References

Classification and diagnosis of congenital malformations of the female genital tract according to ESHRE/ESGE