

Iatrogenic Ectopic Pregnancy: Case Report

İyatrogenik Ektopik Gebelik

Mete ERGENOĞLU, MD,^a
Özgür YENİEL, MD,^a
Çağdaş ŞAHİN, MD,^a
Mert KAZANDI, MD^a

^aDepartment of Obstetrics and Gynecology,
Ege University Faculty of Medicine,
İzmir

Geliş Tarihi/Received: 10.07.2009
Kabul Tarihi/Accepted: 22.02.2010

Yazışma Adresi/Correspondence:
Özgür YENİEL, MD
Ege University Faculty of Medicine,
Department of Obstetrics and Gynecology,
İzmir,
TÜRKİYE/TURKEY
drayeniel@hotmail.com

ABSTRACT Ectopic pregnancy is well known complication of pregnancy and during the past years there is an significant increase in the number of ectopic pregnancies. Approximately 1% of the pregnancies are ectopic, with the gestational sac usually implanted in the fallopian tube. Both uterine perforation and retained trofoblastic tissues are the most important complication of curettage for termination of the pregnancy. Trophoblastic tissue persistence has been described in the abdominal cavity after surgical treatment of ectopic pregnancy. More infrequently the cause of the ectopic trophoblast is linked to uterine perforation due to curettage for termination of pregnancy. Ultrasonographic images and clinical approach may suggest an ectopic pregnancy in this clinic presentation. A case of serosal trophoblastic tissue implantation following curettage for incomplet abortus of gestation was described in here.

Key Words: Iatrogenic; pregnancy, ectopic

ÖZET Ektopik gebelik, gebeliğin iyi bilinen bir komplikasyonu olup son yıllarda sayısında belirgin artış izlenmektedir. Gebeliklerin yaklaşık yüzde biri ektopik olup genellikle fallop kanalına yerleşmektedir. Uterus perforasyonu ve trofoblastik doku retansiyonu cerrahi gebelik sonlandırmalarında karşılaşılan en önemli komplikasyonlardır. Ektopik gebeliğin cerrahi tedavisi sonrası batin içerisinde trofoblastik doku retansiyonu bildirilmiştir. Daha ender olarak da ektopik trofoblast oluşumu küretaj ile gebelik sonlandırmalarında uterus perforasyonu ile ilişkilidir. Bu klinik olgularda ultrasonografiye ait görüntüler ve klinik tablo ektopik gebeliği düşündürür. Sunulan olguda birinci trimester gebeliğin inkomplet abortusunun küretaj ile sonlandırmasını takiben serozal trofoblastik doku implantasyonu tanımlanmıştır.

Anahtar Kelimeler: İyatrogenik; gebelik, ektopik

Türkiye Klinikleri J Gynecol Obst 2010;20(3):196-8

Uterine perforation is an rarely seen complication of curettage for termination of pregnancy¹ and more infrequently, trophoblastic ectopic tissue can be found in the peritoneal cavity as the result of uterine perforation.² Implants of trophoblastic tissue on peritoneal surfaces have been described after surgical treatment for ectopic tubal pregnancy.³⁻⁵ Another report was about myometrial trophoblastic implant as a complication of curettage for termination of pregnancy.⁶ In this report we describe a case of trophoblastic tissue and gestational sac implantation in the serosal surface of uterus after a curettage for termination of pregnancy.

CASE REPORT

A 30-year-old, white, female nullipara woman was admitted to our unit with a history of curettage for incomplet abortus two weeks ago. Patient had persistent uterine bleeding after this procedure until admission. Pathologic examination of this curettage revealed hypersecretory endometrium and pathologist also reported suspicion of ectopic pregnancy. The beta-human chorionic gonadotropin (β -hCG) level was 150 mIU/ml five days prior to curettage for incomplet abortus. At presentation physical examination was unremarkable; ultrasound examination revealed empty uterine cavity and normal adnexes; biochemistry parameters were unremarkable except level of β -hCG, it was 1580 mIU/mL. Patient has a medical history of epilepsy and cardiac valvuler disease. After serial consultations for medical history, diagnostic laparoscopy was performed to evaluate whether ectopic pregnancy or not. Ten millimeter gestational sac and trophoblastic tissue was observed in a cavity which was thought to be performed by curette on the anterior serosal surface of the uterus through the myometrium (Figure 1). There wasn't any other injury or pathologic apparence though the pelvis or abdomen. Gestational material was preserved for pathologic examination and cavity over the uterine serosa was coagulated by bi-polar electrocoagulator. Diagnostic histeroscopy was also performed at the same session to observe a defect or pathology of uterine cavity. Histeroscopy revealed intact endometrial cavity. Microscopic examination of the material from the diagnostic L/S revealed product of pregnancy.



FIGURE 1: Ten millimeter gestational sac and trophoblastic tissue was observed in a cavity which was thought to be performed by curette on the anterior serosal surface of the uterus through the myometrium.

DISCUSSION

Uterine perforation is a well known complication of suction curettage. Uterine perforation may occur during sounding of the uterus, dilatation, or curettage. The incidence of perforation varies but there are two important determinants of this complication. One is skill of the physician and the other is position of the uterus. Accidental uterine perforation can be recognized easily, as the instrument passes without resistance further than it should have. If uterine perforation is performed with a narrow dilator or a sound in small diameter, observation may be sufficient therapy. But if perforation is performed by suction or sharp curettes, considerable intra-abdominal organ damage can be caused. In this circumstances examination of the abdominal cavity especially bowel, is the safest course of action.

Although uterine perforation and its complications are well known, displacement and growth of trophoblastic tissue and gestational sac along the perforation tract is a very rare condition and only a few cases have been described. Lam *et al.* reported a case of viable trophoblastic tissue entrapped in a uterine hematoma with evidence of previous uterine perforation after surgical evacuation of a missed miscarriage at 7 weeks' gestation.⁷ Anwar *et al.* reported case of ectopic pregnancy in the perforation tract of previous pregnancy. In this case patient represented with vaginal bleeding and right sided pelvic pain at 6 weeks of gestation. Patient had a history of uterine perforation during the curettage of retained placental tissues two months ago. During the assesment of patient, transvaginal ultrasonography revealed fundal intramural gestational sac and fetal pole with cardiac activity. As the complaints of patient worsening, repeat ultrasonography revealed absence of gestational sac and fluid in the cul de sac. During the exploratory laparotomy 7 mm bleeding uterine wall defect and 1500 ml blood was noticed. Sharp curettege was performed through the defect for products of conception and defect was sutured with interrupter 0–Vicryl sutures.⁸ Wu *et al.* also reported case of omental pregnancy with hemoperitoneum as a sequele of suction dilatation and curettage. In the

first trial as perforation had been suspected during suction curettage, she was performed emergency laparotomy and wound repair. Patient admitted emergency department with the signs of peritonitis due to intraabdominal bleeding after 19 days of operation. Assessment of patient revealed large amount of fluid in douglas pouch and no visible intrauterine gestational sac or adnexial mass in ultrasonography and elevating levels of β -hCG. Due to this clinic presentation emergency laparotomy performed. The omentum was found to adhering to scar of recent uterine perforation. 3×3 cm bleeding mass was also noted and partial omentectomy was performed. According to microscopic examination, omentum with decidual and trophoblastic tissues were observed.⁹ Another report by Dessouky was also about implantation of trophoblastic tissue in omentum after uterine perforation.² Trophoblastic tissue implantation after surgical procedures for ectopic pregnancies has been reported to be as high as 1.9% by laparoscopy and 0.6% by la-

parotomy.³⁻⁵ In these cases the trophoblastic peritoneal implants appear as soft, friable, vascular lesions. These lesions are prone to bleeding and it is difficult to control.⁴ Increased β -hCG levels after a termination of pregnancy are usually due to the presence of residual intracavitary trophoblastic tissue; when ultrasonography reveals an empty cavity, in general risk of an ectopic pregnancy should be considered.¹⁰ In our case patient had history of curettage for incomplete abortus prior to admission to our clinic. Persistent uterine bleeding, microscopic examination, elevating levels of β -HCG after curettage and transvaginal ultrasonographic examination were all compatible with ectopic pregnancy. Patient's vital signs were all stable against previous cases described and if this extreme diagnosis of iatrogenic implanted pregnancy was considered, first line therapy should be medical therapy by methotrexate whether systemic or into gestational sac for these patients through β -HCG follow-up.¹¹

REFERENCES

1. Zhou W, Nielsen GL, Moller M, Olsen J. Short-term complications after surgically induced abortions: a register-based study of 56 117 abortions. *Acta Obstet Gynecol Scand* 2002; 81(4):331-6.
2. Dessouky DA. Ectopic trophoblast as a complication of first trimester induced abortion. *Am J Obstet Gynecol* 1980;136(3):407-8.
3. Cartwright PS. Peritoneal trophoblastic implants after surgical management of tubal pregnancy. *J Reprod Med* 1991;36(7): 523-4.
4. Garcia-Padial JL, Sotolongo JF, Casey MJ. Persistent trophoblastic implants after salpingostomy for ectopic pregnancy. *J Laparoscopic Surg* 1993;3(2):157-60.
5. Reich H, DeCaprio J, McGlynn F, Wilkie WL, Longo S. Peritoneal trophoblastic tissue implants after laparoscopic treatment of tubal ectopic pregnancy. *Fertil Steril* 1989;52(2): 337-9.
6. Pascual MA, Tresserra F, Dexeus D, Grases PJ, Dexeus S. Myometrial trophoblastic implant as a complication of surgically induced first-trimester termination of pregnancy. *Ultrasound Obstet Gynecol* 2003;22(2):194-5.
7. Lam PM, Yim SF, Leung TN. Entrapment of viable trophoblastic tissue in a uterine hematoma after surgical evacuation. *J Reprod Med* 2002;47(2):170-2.
8. Nassar AH, Charara I, Nawfal AK, Ghulmiyyah L, Usta IM. Ectopic pregnancy in a uterine perforation site. *Am J Obstet Gynecol* 2009; 201(1):e15-6.
9. Wu HM, Chen CP, Chang KM, Chang SJ. Omental trophoblastic implant with hemoperitoneum as a sequela of suction dilatation and curettage. *Taiwan J Obstet Gynecol* 2008; 47(2):250-1.
10. Kohorn EI. Persistent low-level "real" human chorionic gonadotropin: a clinical challenge and a therapeutic dilemma. *Gynecol Oncol* 2002;85(2):315-20.
11. Yermez E, Sekü İ, Gür EB, Boyacıoğlu H, İspahi C. [Comparison of medical and surgical management in ectopic pregnancy]. *Türkiye Klinikleri J Gynecol Obst* 2004; 14(1):21-6.