

Gestational choriocarcinoma arising in a tubal ectopic pregnancy: case report

F.K. Boynukalin¹, Z. Erol², A.I. Aral³, I.H. Boyar³

¹Department of Obstetrics and Gynecology, Baskent University Faculty of Medicine, Istanbul Hospital, Istanbul

²Department of Pathology; ³Department of Obstetrics and Gynecology, Sanliurfa Maternity Hospital, Sanliurfa (Turkey)

Summary

Objectives: Gestational choriocarcinoma associated with ectopic pregnancy is an extremely rare event. Here we report one of these cases. **Case:** A 38-year-old, gravida 4, parity 3, patient was admitted to the emergency room with the complaint of abdominal pain. Peritoneal irritation signs were present and serum hCG level was found to be greater than 15000 mUI/ml. Transvaginal ultrasound images were compatible with ruptured tubal ectopic pregnancy. Hemoperitoneum and ruptured tuba were found at laparotomy and a right salpingectomy was performed. The histopathological evaluation reported the lesion as primary tubal choriocarcinoma. The patient was referred to a tertiary care center for treatment and follow-up. **Conclusion:** Adequate monitoring of β -hCG titers and careful examinations of pathologic specimens are important to avoid misdiagnosis of ectopic gestational trophoblastic disease.

Key words: Choriocarcinoma; Ectopic pregnancy; Gestational trophoblastic disease.

Introduction

Ectopic pregnancy is one in which the site of implantation occurs other than the endometrial cavity. Its incidence is reported as 1.3-2% [1]. Gestational choriocarcinoma associated with ectopic pregnancy is an extremely rare event with a reported incidence of approximately 1.5 per 1,000,000 births [2]. We report a case of a primary tubal choriocarcinoma.

Case Report

A 38-year-old, gravida 4, parity 3, patient was admitted to the emergency room with the complaint of abdominal pain and spotty vaginal bleeding. Vital signs were in normal ranges. Abdominal examination revealed peritoneal irritation signs which were more intensive in the right iliac region. Cervical motion tenderness was present on pelvic bimanual examination. The uterus was normal and a right adnexal mass was palpated. Her last menstrual period had been 52 days before and she was using an intrauterine device as a contraceptive method.

Transvaginal ultrasound (TVS) evaluation showed the intrauterine device in the endometrial cavity without a gestational sac. The left adnexal area was normal. In the right adnexal area, the image seen was compatible with a 34.1 mm extrauterine pregnancy and there was free fluid in the cul-de-sac. Serum hCG level was found to be greater than 15000 mUI/ml. Clinical diagnosis was ectopic pregnancy and a laparotomy was performed. In exploration there was 200 ml blood in the pelvic cavity. Tubal rupture at the isthmus level was found and right salpingectomy was performed.

On the second postoperative day the patient was discharged. The histopathological evaluation reported the lesion as primary tubular choriocarcinoma (Figure 1). After this result the treatment planned was TVS, abdominal ultrasound and chest radiog-

raphy were performed for metastatic work-up and there was no sign of metastasis. Serum hCG level was 7216 mUI/ml. Complete blood count and liver function tests were normal. The patient was referred to a tertiary care center for treatment and follow-up.

Discussion

Choriocarcinoma is one of the most serious forms of gestational trophoblastic neoplasia (GTN). Although most cases develop following molar pregnancy, these tumors may follow term pregnancies, spontaneous abortions, pregnancy termination or ectopic pregnancy. Clinical presentation of ectopic GTN is similar with ectopic pregnancy. Gillespie et al. determined the clinical presentation, treatment, and outcome of women diagnosed with ectopic gestational trophoblastic neoplasia [2]. This study concluded that the presentation of ectopic gestational trophoblastic disease is similar to that of ectopic pregnancies. Also, Muto *et al.* reported that patients with tubal gestational trophoblastic disease including partial and complete hydatidiform mole, invasive mole, choriocarcinoma, and placental site trophoblastic tumor cannot be distinguished from patients with tubal pregnancies by means of presenting signs, symptoms, or laboratory tests [3].

The rate of ectopic pregnancy and mean maternal age has increased and more conservative treatment options have become more acceptable. Medical therapy is preferred by most as an alternative treatment. Only methotrexate has been extensively studied as an alternative to surgical therapy [4]. The treatment is initiated without histopathologic determination. Bakri *et al.* stress that appropriate monitoring of β -hCG titers is essential to determine the need for surgical treatment and to avoid missing ectopic gestational trophoblastic disease [5].

Revised manuscript accepted for publication February 22, 2011

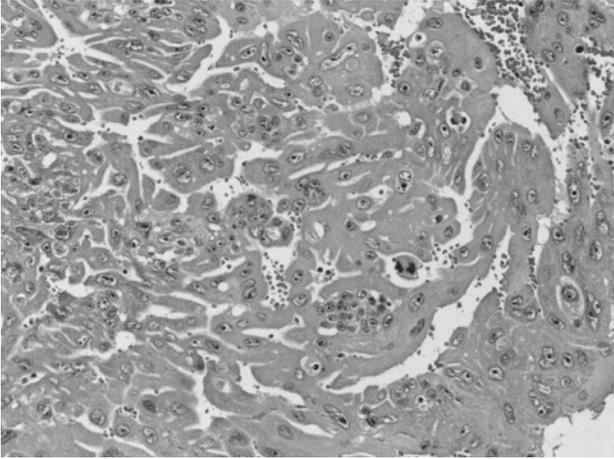


Figure 1. — Tumor section showing cytotrophoblasts and syncytiotrophoblasts.

With increasing use of conservative surgical treatment instead of salpingectomy for the treatment of ectopic pregnancy, the entity of persistent ectopic pregnancy is becoming more common. Incidence of persistent ectopic pregnancy after linear salpingostomy is about 3-20%, being higher when the procedure is performed by laparoscopy and lower when performed by laparotomy [6]. Pathologic examination of a surgically removed specimen is critical to make the difference between persistent ectopic pregnancy and ectopic gestational trophoblastic disease.

In conclusion, to avoid misdiagnosis of ectopic gestational trophoblastic disease, adequate monitoring of β -hCG titers and careful examinations of pathologic specimens are important.

References

- [1] Zane S.B., Kieke B.A. JR., Kendrick J.S.: "Surveillance in a time of changing health care practices: estimating ectopic pregnancy incidence in the United States". *Matern. Child Health. J.*, 2002, 6, 227.
- [2] Gillespie A.M., Lidbury E.A., Tidy J.A., Hancock B.W.: "The clinical presentation, treatment, and outcome of patients diagnosed with possible ectopic molar gestation". *Int. J. Gynecol. Cancer*, 2004, 14, 366.
- [3] Muto M., Lage J.M., Berkowitz R.S., Golstein D.P., Bertein M.R.: "Gestational trophoblastic disease of the fallopian tube". *J. Reprod. Med.*, 1991, 36, 57.
- [4] ACOG Practice Bulletin No 94. Medical management of ectopic pregnancy. *Obstet. Gynecol.*, 2008, 111, 1479.
- [5] Bakri Y.N., Amri A., Mulla J.: "Gestational choriocarcinoma in a tubal ectopic pregnancy". *Acta Obstet. Gynecol. Scand.*, 1992, 71, 67.
- [6] Graczykowski J.W., Seifer D.B.: "Diagnosis of acute and persistent ectopic pregnancy". *Clin. Obstet. Gynecol.*, 1999, 42, 9.

Address reprint requests to:
 F.K. BOYNUKALIN, M.D.
 Başkent Üniversitesi Eğitim Araştırma Hastanesi
 Kısıklı Caddesi, Oymacı Sokak No:07
 Altunizade 34662
 Uskudar Istanbul (Turkey)
 e-mail: drkubraboybukalin@yahoo.com.tr