CASE REPORT

Unilateral Twin Ectopic Pregnancy

M George,1 S Nadarajah,2 CL Ong3

1Department of Diagnostic Radiology, Tan Tock Seng Hospital, Singapore
2Department of Reproductive Medicine, KK Women’s and Children’s Hospital, Singapore
3Department of Diagnostic & Interventional Imaging, KK Women’s and Children’s Hospital, Singapore

ABSTRACT

Unilateral twin ectopic pregnancy is a rare condition and only about 100 cases have been reported in the literature. In this article, we present a case of twin ectopic pregnancy in the left fallopian tube. A 38-year-old woman who had in-vitro fertilisation came to our department for confirmation of pregnancy. She had high β-human chorionic gonadotropin levels. Transvaginal ultrasonography showed two gestational sacs: one containing a live embryo and the other without an embryo, both in the left adnexa. Twin ectopic pregnancy, even though rare, must be looked for on ultrasound scanning especially in patients having in-vitro fertilisation, because of the potential mortality and morbidity associated with this condition.

Key Words: Chorionic gonadotropin; Fertilization in vitro; Pregnancy, tubal; Twins; Ultrasonography, prenatal

INTRODUCTION

Ectopic pregnancy can pose a diagnostic and therapeutic challenge as the presenting symptoms and signs vary widely between patients. It is a major health risk for women of child-bearing age, and if not treated properly, can lead to life-threatening complications. Several factors increase the risk of ectopic pregnancy; the most important of which is pelvic inflammatory disease, followed by operative trauma, congenital anomalies, tumours, assisted reproductive therapy and adhesions resulting in anatomically distorted fallopian tubes. Twin ectopic pregnancy is a rare condition with only about a hundred cases described worldwide.1 Unilateral twin ectopic gestation is estimated to occur in approximately 1 in 200 ectopic gestations.2

CASE REPORT

A 38-year-old woman who had been married for more...
than 10 years, underwent recent in-vitro fertilisation (IVF) and came to our department for a routine ultrasonographic assessment. She had no history of pain or vaginal bleeding, but was previously diagnosed to have extensive pelvic inflammatory disease on laparoscopy. Her last menstrual period was approximately 6 weeks prior to the ultrasonography.

The initial ultrasound revealed an enlarged left ovary with an empty endometrial cavity, and no other abnormality. The patient was managed conservatively as she was asymptomatic. However, due to rising $\beta$-human chorionic gonadotropin ($\beta$-hCG) levels, ultrasonography was repeated 5 days later. This revealed two extrauterine gestational sacs adjacent to each other (Figure 1). One of the sacs had an embryo with a beating heart (Figure 2) and a crown-rump length measuring 8 mm that corresponded to a gestational age of 6 weeks and 5 days. No embryo was detected in the second sac. The sacs measured 21 mm and 22 mm in diameter, respectively. The uterine cavity was empty. Minimal free fluid was seen in the Douglas cul-de-sac. Both ovaries showed evidence of hyperstimulation with numerous corpora lutea.

Laboratory studies revealed a $\beta$-hCG level of 36,796 IU/L at the time of the second ultrasonography. The patient underwent emergency laparoscopy, which revealed a double ectopic gestation distending almost the entire length of the left fallopian tube (Figure 3); the sacs measured 20 mm and 15 mm. No haemoperitoneum was seen in the pouch of Douglas. Left salpingectomy was performed. The patient did well postoperatively and was discharged after 3 days.

**DISCUSSION**

The incidence of ectopic pregnancies has been increasing steadily since the 1970s, and now accounts for up to 2% of all pregnancies. Several factors are thought to increase the risk of ectopic pregnancy. Pelvic inflammatory disease confers the highest risk, but others include operative trauma, congenital anomalies, tumours, adhesions, and advanced maternal age. Anything that interfere with the passage of the ovum through the tube increases the risk of implantation at an ectopic site.

Most twin ectopic pregnancies are heterotopic, i.e., an
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Intrauterine pregnancy exists alongside an ectopic one. The incidence of such a pregnancy is estimated to be 1 in 7000.6 Most unilateral twin tubal pregnancies are monozygotic and monochorionic.7 The presence of 2 gestational sacs, as in our case, indicates a dichorionic pregnancy. Studies suggest a delay in ovum transport (including the tubal-ring sign, representing a tubal gestational sac), and echogenic cul-de-sac fluid.

Treatment of an ectopic pregnancy depends on its clinical presentation, size, and complications, and may entail conservative, medical, or surgical intervention. Ectopic pregnancies can resolve spontaneously through regression or tubal abortion. Surgical management should be reserved for patients who refuse or have contraindications to medical treatment, those in whom medical treatment fails or they become haemodynamically unstable. Laparoscopic treatment of ectopic pregnancy is associated with lower cost, less operating time, shorter hospital stays, and faster recovery. Salpingostomy is preferred, particularly for women who wish to preserve their fertility.

In our case, the patient was asymptomatic and the affected fallopian tube was unruptured. Two ectopic gestational sacs were identified, only one of which showed a live conceptus, and both sacs were in close proximity to each other. The presence of multiple corpora lutea added to the challenge of finding the sacs. The trophoblastic rings are more echogenic than the walls of the corpora lutea. Cursory ultrasound evaluation could have easily missed the second gestational sac, for which reason a systematic evaluation of the adnexa is required.

Twin ectopic pregnancy, even though rare, must be looked for on ultrasound scanning, especially in patients having IVF treatment, because of the potential mortality and morbidity associated with this condition.

REFERENCES