Case Report/Caso Clínico

Bilateral Tubal Ectopic Pregnancy
Gravidez ectópica tubária bilateral

Hospital Garcia de Orta

ABSTRACT

Introduction Bilateral ectopic pregnancy is a rare twin gestation with few cases reported in the literature. We report a case of a woman who presented with an acute abdomen and was subsequently found to have this unusual phenomenon. Case Report A 25-year-old African woman presented to the Obstetrics/Gynaecology emergency department complaining of vaginal bleeding and abdominal pain. The presumptive diagnosis of ruptured left sided ectopic pregnancy was made. An emergency laparotomy performed under general anaesthesia revealed a hemoperitoneum of 1.8 litres, a ruptured left tubal pregnancy with active bleeding and a mass in the right tube. A bilateral salpingectomy was performed. Histopathology confirmed presence of chorionic villi in both tubes with the pregnancy on the left being a lesser gestation than the right. Discussion Laparoscopy is the best surgical approach for most women with bilateral tubal pregnancy. In theory, laparoscopic salpingostomy is the most appropriate and safest treatment. However, bilateral salpingectomy may be necessary when both tubes are extensively damaged and/or actively bleeding. Although successful pregnancies have been reported after conservative surgical treatment of bilateral tubal pregnancies, the risk of recurrence is high. While laparoscopy is considered the gold standard, our decision on an emergency laparotomy was based on the fact that the patient presented with an acute abdomen and was haemodynamically unstable. The implications for future fertility for such patients are significant with the only option for this patient being an assisted reproductive technique. In this case, we referred her to the in vitro fertilization clinic. Conclusion This was a rare case of spontaneous bilateral ectopic pregnancy after conception at different times. With the incidence of ectopic pregnancy likely to continue rising concurrently with the incidences of pelvic inflammatory disease and the use of assisted fertility techniques, it may be that these “rare ectopics” will become less uncommon.

Keywords: pregnancy; ectopic; tubal; Bilateral

INTRODUCTION

Ectopic Bilateral Pregnancy (EBP) is a rare form or twin pregnancy, in which the implantation of the fertilized egg occurs outside the uterine cavity, in the tubes. In the medical literature there are approximately 250 cases reported. The true incidence of EBP is unknown. It is estimated, however, to be between 1 in 750 and 1 in 1,580 ectopic pregnancies, and 1 in 200,000 live births. The incidence in native Africans is considerably higher, estimated to be 1 in 51 ectopic pregnancies, probably reflecting the higher rate of twinning and higher incidence of Pelvic Inflammatory Disease (PID).
In the course of EBP one can find: two pregnancies with the same age, or different ages, both developing; two pregnancies one with normal development and one abortion; and two abortions. In the twin ectopic pregnancy with tube involvement one can find several combinations of implantation sites. Therefore we can have:

1. one ectopic pregnancy with a uterine pregnancy
2. one ectopic pregnancy with a twin uterine pregnancy
3. an ectopic bilateral pregnancy of the same age or not
4. multiple ectopic pregnancies in the same tube
5. one ectopic tube pregnancy with other ectopic pregnancy in another location (ovary, broad ligament, abdominal, etc).

The EBP is the most rare form of twin pregnancy, followed by multiple ectopic pregnancy in the same tube and by the simultaneous pregnancy in the tube and intra-uterine (heterotopic). Many risk factors for ectopic pregnancy are recognized. They include pelvic inflammatory disease (PID), intra-uterine contraceptive device (IUD) use, tubal surgery and assisted reproductive techniques (ART). In the absence of known risk factors, suspicion must remain high, as there are many reported cases of ectopic pregnancy, including EBP, in which none of the traditional risk factors are identified.

The maternal death rate associated with ectopic pregnancy is 0.8 in 1000.

We’ll report a case of EBP rupture that occurred in Hospital Garcia de Orta, Portugal, in 04/06/07.

**CASE REPORT**

A 25-year-old African woman presented to the Obstetrics/Gynaecology emergency department (ED) complaining of vaginal bleeding and abdominal pain. Her last menses was five weeks before the visit. She was sexually active and using no form of contraception. The patient had no history of PID, no prior intrauterine contraceptive device, no use of fertility drugs and no surgery.

The patient reported one live birth 8 years before and one spontaneous abortion 3 months before.

She visited de Ob/Gyn ED one week before with complaints of vaginal bleeding, at the time the physical examination and pelvic ultrasound were normal. Blood specimen was collected for measurement of beta-chorionic gonadotropin (β-hCG) level.

At the time of the current visit the initial vital signs were recorded as follows: blood pressure (BP) 141/89 mmHg, heart rate 97 beats/min, respiratory rate 25 bpm, body temperature (T) 36°C axillary. She was pale and in discomfort. Her abdomen was diffusely tender, mostly in the left lower quadrant with rebound pain. On vaginal exam tenderness on the cervical motion was noted, the cervical os was closed. A small amount of vaginal blood was noted. Her left adnexa was tender on bimanual exam.

The hematocrit was 32 g/dl; haemoglobin 11.1 g/dl beta-chorionic gonadotropin (β-hCG) level of 11384.

A transvaginal ultrasound scan showed no intrauterine pregnancy (IUP), a thickened endometrium and a complex mass in the left adnexa with multiple cystic changes suggestive of left tubal ectopic pregnancy; there were abundant free fluid and clumps in the cul-de-sac. The right tube was not visualized.

The presumptive diagnosis of left-sided ectopic pregnancy was made and the patient was taken to the operating room (OR). She underwent emergent laparotomy under general anesthesia. Hemoperitoneum of 1,800 mL was noted and a ruptured ectopic pregnancy of the left fallopian tube was visualized. A salpingectomy was performed because the left tube was extensively damaged (fig 1). The right fallopian tube was visualized and it had a mass that obstructed the lumen, the differential diagnosis between an ectopic pregnancy and a fibroid tumor was considered. We performed salpingectomy of the right tube because it was also extensively damaged (fig 2).

Postoperatively the patient required blood transfusion. At the first day post surgery the patient complained of shortness of breath, she had no signs of respiratory failure. The abdomen was diffusely tender. The hematocrit 24 g/dl and the haemoglobin 8.2 g/dl after blood transfusion. The chest X-ray was normal. On the 2nd day after surgery the patient’s abdomen was more tender. A transvaginal ultrasound exam was performed; it showed a large quantity of fluid in the pelvic cavity suggesting blood and clots.

**Figura 1 – Left tube.**
The clinical presentation of BEP is unpredictable. It bears no unique clinical features to distinguish it from unilateral ectopic pregnancy. As the diagnosis of an ectopic pregnancy often rests on the absence of an IUP rather than direct visualization of the ectopic itself, ultrasonography cannot be relied upon to make the diagnosis of a BEP. A review of the English language literature from 1965 to the present revealed no reported cases in which a preoperative diagnosis of BEP was made. All had a preoperative diagnosis of ectopic, presumed unilateral, made based on the β-hCG and transvaginal ultrasound. The most common method of diagnosing the second ectopic is by direct inspection of the contralateral tube in the OR. In all but two of the cases reviewed the diagnosis of BEP was made in the OR, like our case. In the other two cases the second ectopic was diagnosed later when it became symptomatic\textsuperscript{10,14}.

Some debate exists regarding what constitutes the definition of “bilateral ectopic pregnancy”. In 1939 Fishback\textsuperscript{9} suggested criteria for the diagnosis of bilateral tubal ectopic pregnancy often rests on the absence of an IUP rather than direct visualization of the ectopic itself, ultrasonography cannot be relied upon to make the diagnosis of a BEP. A review of the English language literature from 1965 to the present revealed no reported cases in which a preoperative diagnosis of BEP was made. All had a preoperative diagnosis of ectopic, presumed unilateral, made based on the β-hCG and transvaginal ultrasound. The most common method of diagnosing the second ectopic is by direct inspection of the contralateral tube in the OR. In all but two of the cases reviewed the diagnosis of BEP was made in the OR, like our case. In the other two cases the second ectopic was diagnosed later when it became symptomatic\textsuperscript{10,14}.

Some debate exists regarding what constitutes the definition of “bilateral ectopic pregnancy”. In 1939 Fishback\textsuperscript{9} suggested criteria for the diagnosis of bilateral tubal ectopic pregnancy. The criteria required a description of the fetuses, or any portion of them, as well as a description of placental material. In 1953, Norris\textsuperscript{6} revised these criteria and broadened the definition, stating that the presence of chorionic villi in each tube should be sufficient to justify the diagnosis.

Unequal growth of bilateral tubal pregnancies has been described\textsuperscript{2,3,10,15} but cannot explain the present case. Our patient had ruptured left tube and abundant hemoperitoneum. The right tube contained a mass that damaged it extensively.

Laparoscopy is the best surgical approach for most women with bilateral tubal pregnancy. In theory, laparoscopic salpingostomy is the most appropriate and safest treatment. However, bilateral salpingectomy may be necessary when both tubes are extensively damaged and/or actively bleeding.

While laparoscopy is considered the gold standard, our decision on an emergency laparotomy was based on the fact that the patient presented with an acute abdomen and was haemodynamically unstable. Although successful pregnancies have been reported after conservative surgical treatment of bilateral tubal pregnancy, the risk of recurrence is high\textsuperscript{5}.

The implications for future fertility for these patients are significant\textsuperscript{3,11}, and the only option for this patient was assisted reproductive techniques. Our patient was referred to IVF evaluation.

CONCLUSION

This was a rare case of spontaneous bilateral tubal pregnancy after conception at different times. Even though our patient didn’t present any risk factors, it is likely that the incidence of ectopic pregnancy continue rising concurrently with the incidences of pelvic inflammatory disease and the use of assisted fertility techniques, so it may be that these “rare ectopics” will become less uncommon.

REFERENCES