

**BILATERAL ECTOPIC PREGNANCY: A CASE REPORT****\*Dr. F. Kamri, K. Tamim, R. Watfeh, Pr. M. Yousfi and Pr. S. Bargach**

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**ABSTRACT**

Bilateral ectopic pregnancy is a rare twin pregnancy with only a few cases reported in the literature. We report the case of a 38-year-old woman with no particular pathological history or high-risk factors for ectopic pregnancy, who had a concomitant bilateral ectopic pregnancy. This 38-year-old woman presented to the obstetrical emergency department with diffuse abdominal pain. The presumptive diagnosis of ruptured right ectopic pregnancy was made on the basis of the clinical and para-clinical findings. An emergency laparotomy was performed revealing a hemoperitoneum of 2L, two ruptured tubal pregnancies, one left and one right with active bleeding. A bilateral salpingectomy was performed. Histopathology revealed the presence of chorionic villus in both tubes. Laparoscopic salpingotomy is the best surgical approach for bilateral tubal pregnancy. However, salpingectomy may be necessary in bilateral ectopic pregnancy when both tubes are severely damaged or actively bleeding. Successful pregnancies have been reported after conservative surgical treatment of bilateral ectopic pregnancies, but the risk of recurrence is high. Our decision to perform an emergency laparotomy followed by bilateral salpingectomy was based on the fact that the patient presented with an acute abdomen and was hemodynamically unstable, and there were numerous bilateral tubal lesions. As the incidence of ectopic pregnancies increases along with the incidence of pelvic lesions inflammatory diseases and the use of assisted fertility techniques; it may be that these "rare ectopics" will become somewhat common.

**INTRODUCTION**

Ectopic pregnancy is defined as an abnormal pregnancy in which the fertilized egg is implanted in a location other than the uterine cavity. The incidence is 2% of first trimester pregnancies. It is the leading cause of death, accounting for 9% to 13% of all pregnancy-related deaths. The incidence of deaths related to ectopic pregnancies is reportedly increasing.

Spontaneous bilateral tubal ectopic pregnancy in the absence of prior ovulation induction is extremely rare and the most unusual of the ectopic pregnancies. The estimated incidence is 1 in 725 to 1580 of all ectopic pregnancies corresponding to 1 in 200,000 live births.<sup>[1-3]</sup>

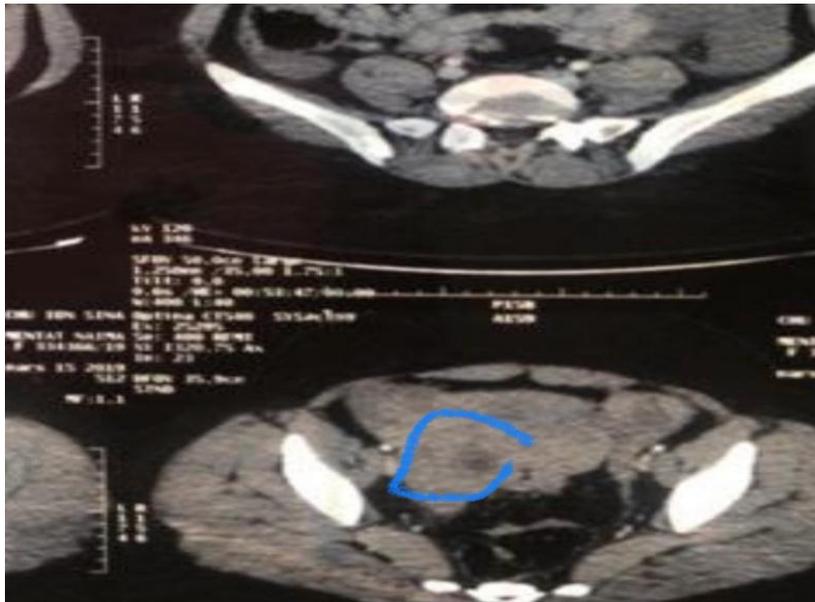
**OBSERVATION**

Mrs k.h, 38 years old, nulligest with no particular medical or surgical history. She showed a primary infertility of 8 years, neither explored nor treated, with notion of recurrent lower genital infections. This patient consulted for acute pelvic pain predominantly in the right iliac fossa and then rapidly spread to the whole abdomen associated with postprandial vomiting with a record of 8 weeks amenorrhea.

On admission her hemodynamic state was unstable with BP=8/4 then 10/6 after filling, normal temperature, HR=114bpm, dextro=3.38 g/l (patient not known to be diabetic), BU=3 x glucose and saturation at 100% with paleness and coldness of extremities.

On palpation the abdomen was tender with a generalized tenderness. On vaginal touch, there was tenderness in the vaginal pouches with a normal sized uterus and a right latero-uterine mass. The cervix was long closed and posterior without endovaginal bleeding.

The BHCG assay was 4852mUI/ml. The endo-vaginal ultrasound showed an empty uterus, a thickened endometrium at 12mm, an abundant effusion in the douglas and the parieto-columns. On the right latero-uterine side there was a 3.56cm mass with a cocoon image including a yolk bladder. On the left there was a doubt about a heterogeneous latero-uterine mass of 2.48cm. In view of the abundant effusion and the doubt about the left latero-uterine mass, the radiologist performed a CT scan to complete the workup. The latter showed a right latero-uterine mass associated with a large hemoperitoneum that was suspicious a right ectopic pregnancy with no individualizable mass contralaterally (fig1).



Pic. 1

The diagnosis of bilateral ectopic pregnancy was suspected. The patient underwent emergency surgery by laparotomy. The intra-operative exploration found two ruptured tubal pregnancies with a hemoperitoneum of

great abundance (2L). A bilateral salpingectomy was performed given the very damaged state of the two tubes and the isthmic location of the two hematosalpinx.(pic2



Pic. 2: Double salpingectomy for bilateral ruptured tubal pregnancy.

Histological examination confirmed the ruptured bilateral tubal pregnancy by demonstrating the trophoblastic and embryonic material.

## DISCUSSION

Worldwide, ectopic pregnancy accounts for 0.25% to 2% of all pregnancies.<sup>[2,3,4]</sup> Bilateral ectopic pregnancy is rare. It occurs in 1 in 200,000 spontaneous pregnancies,<sup>[5]</sup> and ranges from 1 in 725 to 1,580 ectopic pregnancies.<sup>[6]</sup> Compared to natural conception, the rate of ectopic pregnancy is approximately 2.5 to 5 times higher following in vitro fertilization with embryo transfer.<sup>[10]</sup>

Globally, the incidence of ectopic pregnancy is increasing, but its morbidity and mortality are decreasing in developed countries. Unfortunately, this is not the case in emerging countries, where the majority of cases present late in a picture of rupture and hemodynamic

instability.<sup>[11]</sup> as in our case where the patient presented in a hemodynamically unstable state.

More than 95% of ectopic pregnancies occur in the fallopian tube, the ampulla being the most common site.<sup>[8,11]</sup> Other sites are the isthmus, as in our case where the location of the tubal pregnancy was isthmic, the fimbria, the interstitial, the ovaries, the abdominal cavity and caesarean scars.<sup>[8,11]</sup> Other risk factors are pelvic inflammatory diseases as in our case, previous ectopic pregnancies, multiple sexual partners, history of infertility, conceptions following ovulation induction or medically assisted reproduction, fallopian tube anomaly and in utero exposure to diethylstilboestrol.<sup>[8,12]</sup> There was a high index of suspicion for ectopic pregnancy based on the history and examination of this patient with a positive pregnancy test.

The transvaginal ultrasound revealed the presence of ectopic pregnancy on the right with a doubt of a latero-uterine mass on the left before surgery.

Transvaginal ultrasound has a sensitivity of 87-99% and specificity of 94-99%, with extrapolative values of 96.7% and negative predictive values of 99.4% for the diagnosis of ectopic pregnancies.<sup>[13]</sup>

The management of an ectopic pregnancy can be surgical, medical or expectant. The choice of treatment is influenced by the patient's clinical condition, the site of the ectopic pregnancy, whether it is ruptured or not, and whether the patient wants a subsequent pregnancy.<sup>[9]</sup> The \*standard gold standard\* for the treatment of a ruptured ectopic pregnancy is surgical.<sup>[9]</sup> It can be done either by laparotomy as in our case or laparoscopy.

The surgical procedure performed by these routes can be a radical or linear salpingectomy, a salpingotomy which is a conservative method.<sup>[9]</sup> Laparoscopic management of ectopic pregnancy is a safe and effective alternative to laparotomy.<sup>[14]</sup> Laparoscopic procedures are associated with less intraoperative blood loss, spinal analgesia only, shorter hospital stay, and faster return to activity.<sup>[12,15]</sup> A laparotomy with bilateral salpingectomy was performed in the presented case because both tubes were ruptured, with a large amount of hemoperitonea and isthmic localization of both hematosalpinx.

A conservative or medical therapeutic method can be expected. Medical management with methotrexate is preferred for patients with unruptured ectopic pregnancy who are hemodynamically stable.<sup>[16]</sup> These patients must be well motivated and meet the criteria for these options. Management with methotrexate has some advantages over surgery. It is less invasive, less expensive, and does not require a great deal of expertise. Methotrexate can be administered using single dose or multi-dose protocol. Single dose has fewer side effects but is also less effective.<sup>[17,18]</sup> Expectant therapy follows the natural process of ectopic pregnancy. However, it is associated with a high failure rate.<sup>[15]</sup>

Ectopic pregnancy is associated with an increased risk of maternal morbidity and mortality, particularly in developing countries. The incidence of ectopic pregnancy can be reduced by prevention of inflammatory diseases, provision of family planning, and safe abortion services. Early hospital consultation, availability of diagnostic facilities, and blood transfusion services are essential to reduce the morbidity and mortality associated with ectopic pregnancy.

## CONCLUSION

The Ectopic pregnancy remains an important cause of maternal mortality. The diagnosis of bilateral tubal pregnancy is usually made intra-operatively. This emphasizes the importance of identifying and closely

examining both tubes at the time of surgery, even in the presence of significant adhesions.

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