

SPONTANEOUS BILATERAL TUBAL ECTOPIC PREGNANCY: A RARE CASE REPORT**Oumaima Sarhdaoui*, Aicha Bennani, Khaoula Lakhdar, Najia Zraidi, Amina Lakhdar, Abdelaziz Baidada and Aicha Kharbach**

Gynaecology-Obstetrics and Endoscopy Department, Maternity SOUISSI, University Hospital Center IBN SINA, University Mohammed V, Rabat, Morocco.

***Corresponding Author: Oumaima Sarhdaoui**

Gynaecology-Obstetrics and Endoscopy Department, Maternity SOUISSI, University Hospital Center IBN SINA, University Mohammed V, Rabat, Morocco.

Article Received on 24/12/2022

Article Revised on 14/01/2023

Article Accepted on 04/02/2023

ABSTRACT

Ectopic pregnancy complicates 0.25%–2% of all pregnancies and is one of the most common causes of first-trimester maternal mortality in developing countries due to late diagnosis. Spontaneous ruptured bilateral tubal ectopic pregnancies are extremely rare, with very limited data on its occurrence in the literature. Clinical presentation of these cases does not differ as for unilateral versus bilateral ectopic pregnancy, and sometimes symptoms overlap those of spontaneous abortion. Management of these rare cases presents the clinician with diagnostic and management dilemmas. This is primarily due to rarity of the condition posing diagnostic difficulties with ultrasonography and implication of its treatment on fertility of the women. We report a case of a 33-year-old multipara with a history of amenorrhea of 8 weeks and complaints of vaginal spotting of and abdominal pain in the last 7 days. On admission, the diagnosis of ruptured ectopic pregnancy was made on clinical findings and ultrasonography. However, both fallopian tubes were found to harbor ectopic gestational sac with bleeding rents on the tubal walls at surgery. She subsequently had bilateral salpingectomy with good outcome.

KEYWORDS: Bilateral ectopic Pregnancy, Ruptured, Tubal, Salpingostomy, Salpingectomy.**INTRODUCTION**

A bilateral tubal pregnancy (BTP) is the rarest form of extrauterine pregnancy, frequency of which is 1-2 percent of all ectopic pregnancies and 1 in 200,000 of all pregnancies. They are usually diagnosed at the time of surgery.^[1,2]

Risk factors for ectopic pregnancy include previous history of extrauterine implantation, tubal surgery, documented previous tubal pathology, pelvic infections and inflammatory diseases, and infertility treatment with assisted reproductive technology.^[3]

Clinical presentation of these cases does not differ as for unilateral versus bilateral ectopic pregnancy, and sometimes symptoms overlap those of spontaneous abortion.^[4]

There are established criteria for management of unilateral ectopic pregnancies, which include pharmacologic, surgical, and expectant management under specific circumstances. However, there are no well-defined studies or data to suggest standard of care in the case of bilateral tubal ectopic pregnancies, particularly in the setting of one ruptured and one non ruptured ectopic pregnancy.^[5]

Here, we report a case of a 33-year-old woman with a BTP and hemoperitoneum.

CASE REPORT

A 33-years-old woman, gravida 3 para 3, with history of chlamydial infection, which was treated and confirmed with a test of cure, presented with vaginal bleeding, abdominal pain and distension, for 7 days. She had an amenorrhoea of 8 weeks the patient's serum beta-human chorionic gonadotropin (β hCG) was 15400 IU/L, and his hemoglobin was 5.2 g / dl.

On examination, she was hemodynamically unstable with blood pressure of 90/50 mmHg, a pulse of 119 beats/min, there was diffuse abdominal tenderness but no guarding or rigidity.

Trans-vaginal ultrasound revealed empty uterus with a heterogeneous mass of 3×2cm below and close to the left ovary and free fluid in peritoneal cavity.

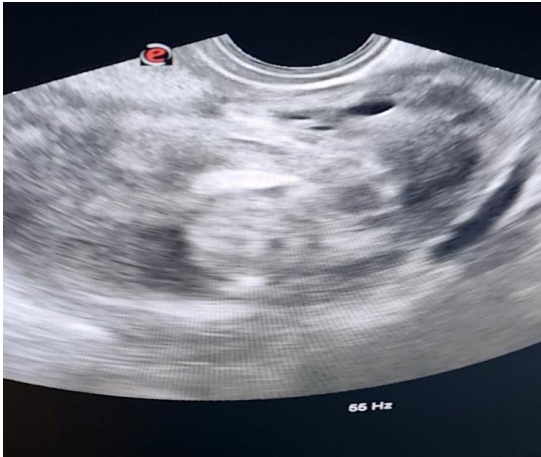


Figure 1: a heterogeneous mass adjacent to the left ovary.

The abdominal ultrasound found an abundant intra- abdominal effusion.



Figure 2: hemoperitoneum.

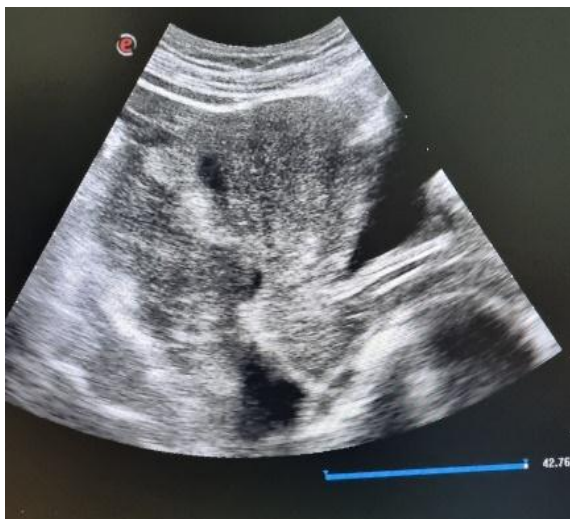


Figure 3: Free Fluid in Peritoneal Cavity.

The diagnosis of ruptured ectopic pregnancy was made on clinical findings and ultrasonography and patient was taken up for immediate laparotomy with arrangement of two units of blood. On Laparotomy the diagnosis of bilateral tubal ectopic

was made (Figure 1). Hemoperitoneum approx. 1 liter was present, there was right sided ruptured ampullary ectopic gestation and left sided ruptured ampullary ectopic gestation was found, uterus was normal in size and both ovaries were normal.



Figure 4: left tubal ectopic pregnancy.

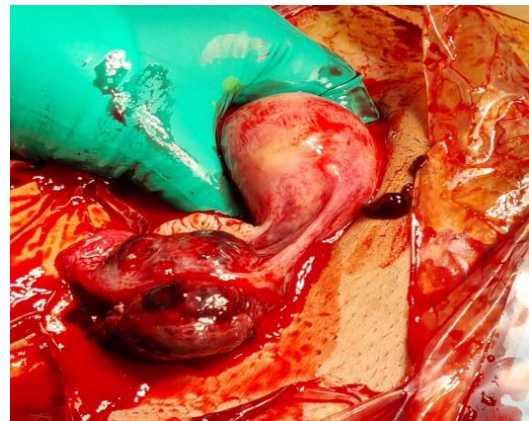


Figure 5: Right tubal ectopic pregnancy.

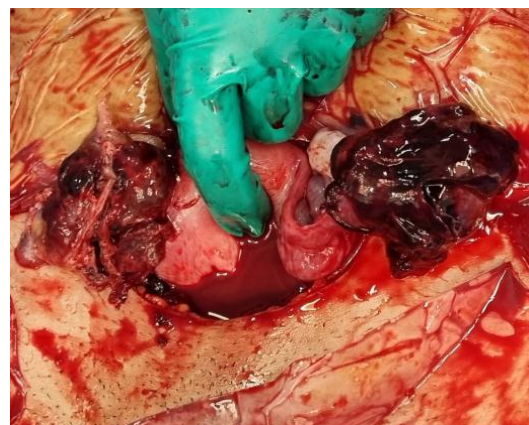


Figure 6: Bilateral tubal ectopic pregnancy.

Bilateral salpingectomy was done. Specimens were sent for histopathology. 3 units of blood were transfused post operatively. histopathology confirmed the presence of bilateral ectopic pregnancy.



Figure 7: Bilateral Salpingectomy.

DISCUSSION

Ruptured ectopic pregnancy is not a very uncommon diagnosis in emergency admissions; but concurrent bilateral tubal pregnancy is very rare.^[6]

Higher incidence of BTPs has been seen after the use of Assisted Reproductive Techniques (ARTs) or following ovulation induction^[7], increased rates of tubal ligation, and other damage to the fallopian tubes: a previous tubal pregnancy, sexually transmitted diseases, endometriosis, or adhesions from previous interventions.^[8,9,10,11] Our patient had a history of chlamydia infection, which was treated and confirmed with a test of cure.

In the absence of ARTs or ovulation induction, BTP is the rarest form of extra uterine pregnancy^[12]; twin pregnancies in the same tube and heterotopic pregnancies are thought to be more common.^[13,14]

The diagnosis of bilateral ectopic pregnancy is often challenging as the clinical symptoms and signs may not be indicative of bilateral involvement.^[9] Laboratory test with β hcg levels is not suggestive of unilateral or bilateral nature and sonographers maybe falsely reassured if they are not careful and satisfied with visualization of ectopic gestation on one side.^[15]

Ultrasonography is capable of diagnosing ectopic pregnancy when a gestational sac with a yolk sac or embryo is present within the tube, with a positive predictive value of 80 percent.^[16]

Management depends on the extent of the damage to the fallopian tube and the desirability of future fertility. According to the American College of Obstetricians and Gynecologists (ACOG), methotrexate is the treatment of choice for the medical management of ectopic pregnancy in those who do not have absolute contraindications. Instead, these patients are typical candidates for surgical intervention.^[16]

The decision to perform a salpingostomy versus salpingectomy is determined by the patient's desire for future fertility and the extent of fallopian tube damage.^[16] This emphasizes the importance of maintaining a high level of suspicion at the time of surgical intervention and of visualizing the contralateral tube during laparoscopy to avoid missing a potential second ectopic tubal pregnancy.^[17] One cohort study found that salpingostomy is associated with higher rates of subsequent intrauterine pregnancy but also a higher risk of a repeat ectopic pregnancy.^[18] When significant fallopian tube damage is visualized, salpingectomy is the preferred method of treatment, as seen in our patient.

CONCLUSION

Bilateral tubal pregnancy is the rarest form of ectopic pregnancy. The diagnosed of bilateral tubal pregnancy is usually made intra-operatively.

This emphasizes the need to thoroughly examine pelvis for any other ectopic gestation during surgery.

REFERENCES

1. CM Farquhar, Ectopic pregnancy, *Lancet*, 2005; 366: 583-91.
2. GL Geiger, N Jr McGhee, Bilateral ruptured tubal pregnancies associated with oral contraceptives. *J Natl Med Assoc*, 1971; 63(5): 321-22.
3. W. M. Ankum, B. W. Mol, F. Van der Veen., P. M. Bossuyt, Risk factors for ectopic pregnancy: a meta-analysis, *Fertil Steril*, 1996 Jun; 65(6): 1093-9.
4. V. P. Sepilian, M. E. Rivlin, Ectopic Pregnancy: Practice Essentials, Background, Etiology, emedicine medscape, updated, 2022; June 23.
5. Q. Katler, L. Pflugner, A. Martinez, Management of Bilateral Ectopic Pregnancies after Ovulation Induction Using Unilateral Salpingectomy and Methotrexate for the Remaining Ectopic with Subsequent Intrauterine Pregnancy, *Case Rep Obstet Gynecol*, 2018 Jul 5; 2018: 7539713. doi: 10.1155/2018/7539713.
6. P. Kaur, U. Miglani, V. K. Kadam, P. Laul, Concurrent bilateral ectopic pregnancy: a rarity, *Int J Reprod Contracept Obstet Gynecol*, 2015 Aug; 4(4):1197-1199.
7. J Brady, M Wilson, Spontaneous bilateral tubal ectopic pregnancy, *J R Soc Med*, 2005; 98: 120–21.
8. J Andrews, S Farrell, Spontaneous bilateral tubal pregnancies: a case report. *J Obstet Gynaecol Can*, 2008; 30(1): 51–54.
9. JF De Los Ríos, JD Castañeda, A Miryam, Bilateral ectopic pregnancy. *J Minim Invasive Gynecol*, 2007; 14(4): 419–427.
10. Ryan MT, Saldana B: Bilateral tubal ectopic pregnancy: a tale of caution. *Acad Emerg Med*, 2000; 7(10): 1160–1163.
11. Shaw JL, Dey SK, Critchley HO, Horne AW: Current knowledge of the aetiology of human tubal ectopic pregnancy. *Hum Reprod Update*, 2010; 16(4): 432–444.
12. Andrews J, Farrell S. Spontaneous bilateral tubal pregnancies: A case report. [1] *J Obstet Gynaecol Can*, 2008; 30: 51-54.
13. S. Norris, Bilateral simultaneous tubal pregnancy. *Can Med Assoc J*, 1953; 68: 379– 81.
14. EJ Fox, FF Mevs, Simultaneous bilateral tubal pregnancies. Report of 2 cases. *Obstet Gynecol*, 1963; 21: 499–501.
15. G. Condous, E. Okaro, A. Khalid, C. Lu, S. Van Huffel, D. Timmerman, T. Bourne, The accuracy of Transvaginal ultrasonography for the diagnosis of ectopic pregnancy prior to surgery, 2005 May;

20(5): 1404-9. doi: 10.1093/humrep/deh770. Epub 2005 Feb 3.

16. A. Elfeky, R. McLaren, D. Herzog, R. Grazi, Spontaneous Bilateral Tubal Ectopic Pregnancy in a Low-Risk Patient: A Case Report with Implications for Preoperative Patient Counseling Available, *Case Reports in Obstetrics and Gynecology*, 2021. doi.org/10.1155/2021/5588869.
17. W. Li, G. Wang, T. Lin, W. Sun, Misdiagnosis of bilateral tubal pregnancy: a case report. *J Med Case Rep*, 2014; 8: 342. 10.1186/1752-1947-8-342.
18. X. Cheng, X. Tian, Z. Yan, M. Jia, J. Deng, Y. Wang, D. Fan, Comparison of the fertility outcome of salpingotomy and salpingectomy in women with tubal pregnancy: a systematic review and meta-analysis. *PLoS One*, 2016; 11: e0152343. 10.1371/journal.pone.0152343.