

## Case Report

# Bilateral ruptured tubal pregnancy: a case report

Gagandeep Kour\*, Tapasya Dhar, Shristi Jaiswal, Vijeta Sobti, Roma Isaacs

Department of Obstetrics and Gynaecology, Christian Medical College and Hospital, Ludhiana, Punjab, India

**Received:** 07 October 2017

**Accepted:** 09 November 2017

**\*Correspondence:**

Dr. Gagandeep Kour,

E-mail: [drgagan2012@gmail.com](mailto:drgagan2012@gmail.com)

**Copyright:** © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

### ABSTRACT

The infrequency with which Bilateral Tubal Pregnancy (BTP) occurs makes it a rare entity with an estimated incidence of 1 in 2,00,000 of all pregnancies and about 0.1 percent of all ectopic pregnancies. In the last few decades enhancement in the rate of occurrence has been reported in literature which has been attributed to Assisted Reproductive Technology (ART), Intra-Uterine Devices (IUD) and Pelvic Inflammatory Diseases (PID). We report a case of ruptured BTP where rupture of one tube preceded the rupture of contralateral side by approximately 3 weeks. 30 years old G4P2L1A1 presented with complaints of nausea and vomiting, vaginal bleeding and pain lower abdomen. There was no history of ART, IUCD or PID. A presumptive diagnosis of ruptured tubal pregnancy was made on the basis of clinical examination and ultrasound findings and patient was taken up for laparotomy. There was a right tubo-ovarian mass with bleeding from ruptured tube. Right salpingo-oophrectomy was done. Left tube on examination revealed a mass with a bleeding rent. Left salpingectomy was done because of extensive damage. Bilateral ruptured tubal ectopic pregnancy was confirmed on histopathological examination. BTP is likely to be missed even during USG as was in this case. This emphasizes the need to thoroughly examine pelvis for any other ectopic gestation during laparotomy.

**Keywords:** Bilateral, Concurrent, Pregnancy, Tubal

### INTRODUCTION

Bilateral tubal pregnancy (BTP) is a rare obstetrical entity, frequency of which is 1-2 percent of all ectopic pregnancies and 1 in 2,00,000 of all pregnancies.<sup>1,2</sup> Higher incidence of BTP has been reported in native African population which has been attributed to higher incidence of pelvic inflammation and twinning in this region.<sup>3</sup> Ever since the first case of BTP was published by McDonald in 1913, about 200 cases of BTP has been reported in literature.<sup>4</sup>

A significant escalation in occurrence of BTP has been observed in past three decades due to assisted reproductive technology (ART), pelvic inflammatory diseases (PID) and tubal surgeries.<sup>5</sup> Management of BTP is complicated by the fact that this condition is rarely diagnosed pre-operatively and is likely to be missed intra-

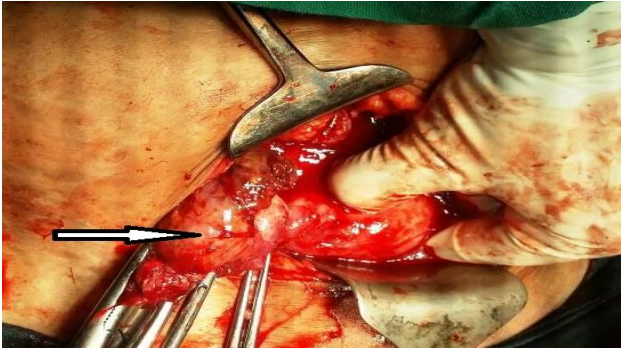
operatively.<sup>4</sup> Pre-existing tubal damage significantly contributes to increased risk of ectopic tubal pregnancy.<sup>6</sup>

### CASE REPORT

A, 30 years old G<sub>4</sub>P<sub>2</sub>L<sub>1</sub>A<sub>1</sub> was admitted in the emergency ward of this institution with history of amenorrhoea of 9 weeks and abdominal pain with distension since, 20 days associated with 2 episodes of fainting attacks 3 weeks apart. She had regular menstrual cycles before this pregnancy. She was not taking any treatment for infertility and gave no history suggestive of PID.

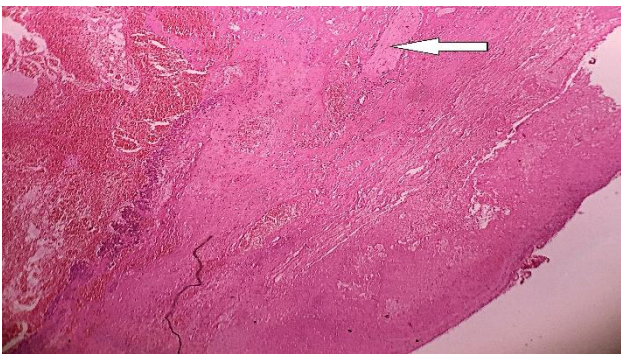
Physical examination at the time of admission revealed moderate pallor, pulse rate of 104 bpm, BP 110/60 mm of Hg. Abdominal examination revealed distension and a paramedian scar of previous cesarean section done for obstructed labour. Lower abdomen was tender with

guarding and bowel sounds were normal. Per-vaginal examination demonstrated bilateral adnexal fullness and tenderness more on the right side.



**Figure 1: Tubo-ovarian mass (right side).**

On investigations, urine pregnancy test was positive. Trans-vaginal sonography revealed normal appearing uterus with 5.7x3.9cms dimensions and endometrial thickness of 9mm. In right hemi-pelvis, note was made of an extra-uterine gestation sac with CR length of 2.6cms corresponding to 9wks and 4days gestation fetus with no cardiac activity. Moderate amount of free fluid was observed in abdomen and pelvis. Left ovary appeared normal on sonography and showed corpus luteal cyst measuring 3x2.3cms. Right ovary could not be visualized separately. Hemogram showed Hb 6.1 gm%, PCV 22.4%, WBC 5300 per-cubic mm and platelets 2.4 lacs per-cubic mm. Her blood group was O<sup>+</sup>ve. She had normal bleeding parameters and normal renal function tests.



**Figure 2: Chorionic villi (arrow) eroding wall of right fallopian tube; H and E 40x.**

A presumptive diagnosis of ruptured right tubal ectopic pregnancy was made, and patient was taken up for exploratory laparotomy proceed salpingectomy.

On laparotomy, about 500gm clots were evacuated and about 1000ml hemoperitonium removed from abdominal cavity. A right sided tubo-ovarian mass measuring 6x5cms was observed. There was a rent in right uterine tube which was bleeding. The findings were suggestive of ruptured right tubal pregnancy. Since ovary was completely stuck to tubal mass and could not be

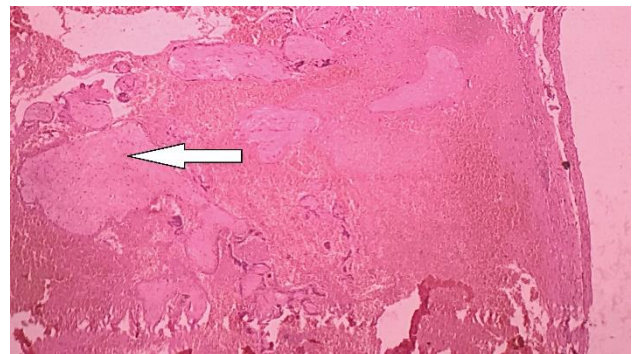
separated, right sided salpingo-oophorectomy was carried out.



**Figure 3: Ruptured wall (arrow) of left fallopian tube.**



**Figure 4: Gestational sac (arrow) in left fallopian tube in cut section.**



**Figure 5: Chorionic villi (arrow) eroding wall of left fallopian tube; H and E 40x.**

Examination of left tube revealed a mass measuring 4x4cms in the ampullary region with a rent in the most dilated area on the posterior tubal surface which was bleeding and suggestive of ruptured left ectopic tubal pregnancy. Organised clots in the omentum around left sided mass were observed. Family of the patient was counselled about the intra-operative findings and left sided salpingectomy was also done after an informed consent. On cut section, a gestational sac measuring 2x2cms was present in the left tube. Two units of packed red blood cells (PRBC) were transfused during surgery



and one unit post-operatively. She was discharged on 5<sup>th</sup> post-operative day in a satisfactory condition. Follow up after one month was unremarkable. Excised tissues were sent for histopathological examination. Histopathology report suggested bilateral fallopian tubes rupture with retained and infected products of conception. Right ovary showed congestion and hemorrhagic necrosis.

## DISCUSSION

Bilateral tubal ectopic pregnancies constitute rare gynaecological condition which has high potential for maternal morbidity and mortality.<sup>7</sup> Recently the condition has shown increasing trend because of excessive use of drugs for treatment of infertility. In the past two decades, three-fold increase has been observed.<sup>7,8</sup> Various explanations which have been postulated for this condition include multiple ovulations, superfoetation and transperitoneal migration of trophoblast from one tube to another. Pre-operational diagnosis is difficult due to unpredictable clinical presentation with no unique feature to distinguish unilateral from bilateral ruptured tubal pregnancy.<sup>9</sup>

It is very difficult to pick up the diagnosis on USG and so is the case with serum  $\beta$ -HCG estimation.<sup>10</sup> Our case was unusual case of ruptured tubal pregnancy in which patient presented with acute ruptured tubal pregnancy on one side and an old ruptured tubal pregnancy with omental mass organised around it on the other side. The condition was likely to be missed until and unless a thorough examination of pelvis is made at the time of laparotomy because of partially healed rupture on one side.

Cases have been reported where the contra-lateral ruptured tubal conception was overlooked necessitating repetition of procedure after few days.<sup>9</sup> Intra-operatively once a gestational sac is found, the second sac is usually not expected and is likely to be missed. High index of suspicion and judicious look on the opposite tube in the operating room is the most effective method for diagnosing second pregnancy.

Extent of tubal damage, patient's parity, wish to have future pregnancy and availability of resources will determine the management by salpingostomy or salpingectomy. Conservative surgery should be preferred if patient wishes to retain her fertility and desires to prevent family disintegration associated with childlessness. Salpingostomy preserves the tube but at the risk of repeated tubal pregnancy.<sup>11</sup>

It should be done only in properly selected cases and should be avoided in patients who are not able to receive regular medical care in future conception culminating in catastrophic outcome. If both the tubes are badly damaged as in our case, bilateral salpingectomy is the only suitable option.

## CONCLUSION

Bilateral tubal pregnancy is a rarest form of ectopic pregnancy. In spite of availability of advanced medical technology, it is difficult to make pre-operative diagnosis of this condition which is usually made intra-operatively. This emphasizes the need to thoroughly examine pelvis for any other ectopic gestation during surgery.

*Funding: No funding sources*

*Conflict of interest: None declared*

*Ethical approval: Not required*

## REFERENCES

1. Farquhar CM. Ectopic pregnancy. *Lancet*. 2005;366:583-91.
2. Geiger GL, McGhee N Jr. Bilateral ruptured tubal pregnancies associated with oral contraceptives. *J Natl Med Assoc*. 1971;63(5):321-22.
3. Makinde OO and Ogunniyi SO. Bilateral tubal and twin pregnancies in Ile-Ife, Nigeria. *Int J Gynecol*. 1990;33(4):365-7.
4. Grechukhina O, English DP, Hong W, Kaza R, Ratner E. Spontaneous ruptured heterotopic fallopian tube pregnancy: a challenging case. *Int J Womens Health Wellness*. 2015;1(001):2474-1353.
5. Sheeba M, Supriya G. Spontaneous Bilateral Tubal Gestation: A Rare Case Report. *Case reports in obstetrics and gynecology*. 2016;2016.
6. Kaur P, Miglani U, Kadam VK, Laul P. Concurrent bilateral ectopic pregnancy: a rarity. *International Journal of Reproduction, Contraception, Obstetrics and Gynecology*. 2017;4(4):1197-9.
7. Eze JN, Obuna JA, Ejikeme BN. Bilateral tubal ectopic pregnancies: a report of two cases. *Annals Afric Medic*. 2012;11(2):112-5.
8. Amine BH, Haythem S. Extra-uterine twin pregnancy: case report of spontaneous bilateral tubal ectopic pregnancy. *Pan Afr Med J*. 2015;20:435.
9. Li W, Wang G, Lin T, Sun W. Misdiagnosis of bilateral tubal pregnancy: a case report. *J Medic case reports*. 2014;8(1):342.
10. Jena SK, Singh S, Nayak M, Das L, Senapati S. Bilateral simultaneous tubal ectopic pregnancy: a case report, review of literature and a proposed management algorithm. *JCDR*. 2016;10(3):QD01.
11. Mol F, Strandell A, Jurkovic D, Yalcinkaya T, Verhoeve HR, Koks CA, et al. The ESEP study: salpingostomy versus salpingectomy for tubal ectopic pregnancy; the impact on future fertility: a randomised controlled trial. *BMC women's health*. 2008;8(1):11.

**Cite this article as:** Kour G, Dhar T, Jaiswal S, Sobti V, Isaacs R. Bilateral ruptured tubal pregnancy: a case report. *Int J Res Med Sci* 2017;5:5473-5.