

# A rare case of ruptured twin tubal ectopic pregnancy

Pinkee Saxena, Poonam Laul, Gunjan Chaudhary, Vijay K. Kadam

Deen Dayal Upadhyay Hospital, Hari Nagar, New Delhi

**Abstract** Twin tubal ectopic pregnancies are rare forms of ectopic pregnancies, with an incidence of one in 200 ectopic pregnancies. We present a rare case of ruptured ectopic pregnancy which occurred due to twin tubal pregnancy. This was a spontaneous pregnancy with no risk factor for ectopic pregnancy.

**Keywords:** Pregnancy, tubal ectopic, twin

**Address to correspondence:** Dr Pinkee Saxena, Alaknanda, New Delhi.  
E-mail: drpinkee@hotmail.com

## INTRODUCTION

Twin tubal ectopic pregnancies are rare forms of ectopic pregnancies, with an incidence of one in 200 ectopic pregnancies.<sup>[1]</sup> We present a rare case of ruptured ectopic pregnancy which occurred due to twin tubal pregnancy.

## CASE

A 32-year female, gravida 2, para 1, live 1, presented to the casualty of our hospital with chief complaints of pain in abdomen since last night and feeling of dizziness since morning. She had amenorrhoea of 10 weeks. There was no history of bleeding per vaginum. Her urine pregnancy test was positive. On general examination, patient was conscious, oriented but restless. Her pulse was 120-bpm low volume and her blood pressure was 90/60 mmHg. On clinical examination, she was moderately pale. Systemic examination was normal. On abdominal examination, there was distension of the abdomen with tenderness, guarding and rigidity. On per vaginal examination, cervical motion tenderness and forniceal fullness and tenderness could be elicited. The exact size

of uterus could not be made out due to tenderness. Ultrasound revealed a solid cystic complex mass of size 5 × 5 cm in left adnexa with increased peripheral vascularity and foetus of 8 weeks 5 days with no foetal cardiac activity. Moderate amount of free fluid was seen in the pouch of Douglas. A provisional diagnosis of ruptured ectopic was made. All baseline investigations including blood for grouping and cross-matching were sent. The patient was prepared for emergency exploratory laparotomy. Her haemoglobin was 4.9 g% and haematocrit of 17%, rest investigations within normal limit. Intra-operatively, there was 2-l haemoperitoneum with left ampullary ectopic mass of size 6 × 6 cm which had ruptured. Products of conception were removed from the tube. Examination revealed placental tissue along with twin foetuses [Figure 1]. Left-sided salpingectomy was done. Haemostasis achieved and peritoneal wash was given. Left ovary, right-sided tube and ovary and uterus were found to be normal. Blood and blood products were transfused. Patient's post-operative period was uneventful, and patient was discharged on day 5. The histopathology of the specimen confirmed the diagnosis of ruptured tubal twin pregnancy.

### Access this article online

#### Quick Response Code:



**Website:**  
[www.fertilityscienceresearch.org](http://www.fertilityscienceresearch.org)

**DOI:**  
10.4103/fsr.fsr\_29\_18

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

**For reprints contact:** reprints@medknow.com

**How to cite this article:** Saxena P, Laul P, Chaudhary G, Kadam VK. A rare case of ruptured twin tubal ectopic pregnancy. *Fertil Sci Res* 2018;5:65-7.

## DISCUSSION

The incidence of ectopic pregnancies has been on rise. It accounts for up to 1% to 2% of all pregnancies. This is mainly due to increase in the incidence of pelvic inflammatory disease. Other contributing factors include advanced maternal age, assisted reproductive techniques, tubal surgery, congenital anomalies, intra-uterine device.<sup>[2]</sup>

Anything that interferes with the passage of the ovum through the tube increases the risk of implantation at an ectopic site. Common sites for ectopic pregnancy is the fallopian tube (approximately 95%), with 3% being ovarian in location and the rest (<1%) abdominal or cervical or in the cornua. Even bilateral tubal ectopic pregnancies have been reported. Hence, one must always meticulously inspect the other tube also.<sup>[3]</sup>

Incidence of spontaneous twins pregnancy is 1:90.<sup>[4]</sup> Monochorionic, monoamniotic twin pregnancies will be unilateral. However, if it is dichorionic, diamniotic, it may be unilateral but may rarely present as a bilateral ectopic.<sup>[3]</sup>

Twin ectopic pregnancy is a rare condition. It was first described in 1891 by De Ott.<sup>[5]</sup> Unilateral twin tubal gestations are extremely rare with a reported incidence of one per 200 ectopic pregnancies or one per 125,000 spontaneous pregnancies.<sup>[1]</sup> More than a hundred twin ectopic pregnancies have been reported to date and their incidence has been increasing steadily.

In 1994, Gualandi *et al.*<sup>[6]</sup> documented the first case of unilateral, tubal twin pregnancy with cardiac activity in both embryos, by endovaginal ultrasound. Live twin ectopic pregnancies are thought to occur at a frequency of



**Figure 1:** Twin fetuses in tubal ectopic

one in 125,000. There were less than 12 unilateral ectopic twin pregnancies reported with beating hearts in both embryos.<sup>[7]</sup>

Ectopic twin pregnancy in a previous caesarean scar has also been reported in literature. At times, tubal twin pregnancies assume large size without rupturing.<sup>[8]</sup> Many are diagnosed preoperative. Usually the ectopic twin pregnancies reported in literature are associated with risk factors like tubal surgery,<sup>[9]</sup> sexually transmitted diseases (STD)<sup>[10]</sup> or invitro fertilization (IVF).<sup>[11]</sup> Rarely do they occur in spontaneous conceptions like our patients.

High degree of suspicion is required to diagnose ectopic pregnancy. Transvaginal ultrasonography and human chorionic gonadotropin ( $\beta$ -hCG) have revolutionised the diagnosis of early ectopic pregnancy. Suggestive findings include solid adnexal or tubal mass with tubal-ring sign or a tubal gestational sac and echogenic cul-de-sac fluid. In addition, use of  $\beta$ -hCG assay, especially serial measurements, may improve these evaluations. Studies demonstrated that a  $\beta$ -hCG value of above 1500 mIU/ml corresponds to an approximately 91.5% detection of gestational sacs.<sup>[12]</sup> Early diagnosis can reduce maternal mortality and morbidity which is still seen at times.

In our case, patient reported to hospital for the first time with acute rupture. Treatment of an ectopic pregnancy depends on its clinical presentation, size and  $\beta$ -hCG levels. Surgical management is done in acute ruptured ectopic pregnancy, in haemodynamically unstable patient or in those who have failed medical treatment or have contraindications to medical treatment. Laparoscopic is the preferred treatment as it is associated with lower cost, less operating time, shorter hospital stays and faster recovery. Salpingectomy is the recommended treatment; however, salpingostomy can be considered for women with one tube who are wishing to preserve their fertility. For unilateral tubal twin pregnancies, the surgical approach is usually the reported option in literature.<sup>[13]</sup> In our case, we did salpingectomy as rent was big.

Methotrexate treatment has also been given by few.<sup>[14,15]</sup> Uterine artery embolisation for management of interstitial twin ectopic pregnancy has also been reported.<sup>[16]</sup>

Our patient had no risk factor for ectopic pregnancy and presented as a case of acute ruptured ectopic. This case is reported for its rarity and also signifies the need of early ultrasound for diagnosing ectopic pregnancy even in low-risk women.

## Financial support and sponsorship

Nil.

**Conflicts of interest**

There are no conflicts of interest.

**REFERENCES**

1. Shaw JLV, Dey SK, Critchley HOD, Horne AW. Current knowledge of the aetiology of human tubal ectopic pregnancy. *Hum Reprod Update* 2010;16:432-44.
2. Moini A, Hosseini R, Jahangiri N, Shiva M, Akhoond MR. Risk factors for ectopic pregnancy: A case-control study. *J Res Med Sci* 2014;19:844-9.
3. Eze JN, Obuna JA, Ejikeme BN. Bilateral tubal ectopic pregnancies: A report of two cases. *Ann Afr Med* 2012;11:112-5.
4. Kazandi M, Turan V. Multiple pregnancies and their complications. *J Turk Soc Obstet* 2011;8:21-4.
5. De Ott D. A case of unilateral tubal twin gestation. *Ann Gynecol Obst* 1891 36: 304.
6. Gualandi M, Steemers N, de Keyser JL. First reported case of preoperative ultrasonic diagnosis and laparoscopic treatment of unilateral, twin tubal pregnancy. *Rev Fr Gynecol Obstet* 1994;89:134-6.
7. Kim CI, Lee TY, Park ST, Kim HB, Park SH. A rare case of spontaneous live unilateral twin tubal pregnancy with both fetuses presenting with heart activities and a literature review. *Obst Gynecol Sci* 2018;61:274-7.
8. Goswami D, Agrawal N, Arora V. Twin tubal pregnancy: A large unruptured ectopic pregnancy. *J Obstet Gynaecol Res* 2015;41: 1820-2.
9. Ghanbarzadeh N, Nadjafi-Semnani M, Nadjafi-Semnani A, Nadjafi-Semnani F, Shahabinejad S. Unilateral twin tubal ectopic pregnancy in a patient following tubal surgery. *J Res Med Sci* 2015;20:196-8.
10. Rolle CJ, Wai CY, Bawdon R, Santos-Ramos R, Hoffman B. Unilateral twin ectopic pregnancy in a patient with a history of multiple sexually transmitted infections. *Infect Dis Obstet Gynecol* 2006;2006:10306.
11. Göker EN, Tavmergen E, Ozçakir HT, Levi R, Adakan S. Unilateral ectopic twin pregnancy following an IVF cycle. *J Obstet Gynaecol Res* 2001;27:213-5.
12. Barnhart K, Mennuti MT, Benjamin I, Jacobson S, Goodman D, Coutifaris C. Prompt diagnosis of ectopic pregnancy in an emergency department setting. *Obstet Gynecol* 1994;84:1010-5.
13. Tam T, Khazaei A. Spontaneous unilateral dizygotic twin tubal pregnancy. *J Clin Ultrasound* 2009;37:104-6.
14. Arikan DC, Kiran G, Coskun A, Kostu B. Unilateral tubal twin ectopic pregnancy treated with single-dose methotrexate. *Arch Gynecol Obstet* 2011;283:397-9.
15. Karadeniz RS, Dilbaz S, Ozkan SD. Unilateral twin tubal pregnancy successfully treated with methotrexate. *Int J Gynaecol Obstet* 2008;102:171.
16. Ophir E, Singer-Jordan J, Oettinger M, Odeh M, Tendler R, Feldman Y, *et al.* Uterine artery embolization for management of interstitial twin ectopic pregnancy: Case report. *Hum Reprod* 2004;19:1774-7.