

Unilateral Dizygotic Twin Tubal Pregnancy: A Rare Entity of Extrauterine Pregnancy (About a Case)

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Abstract

Ectopic pregnancies are rare and represent about 2% of all pregnancies. Unilateral ectopic twin pregnancy is even rarer as it represents only 0.5% of all ectopic pregnancies, with an estimated incidence of 1 in 20 000. It shares the same risk factors as ectopic pregnancies in general (smoking, pelvic infection, history of EP, maternal age, uses of assisted reproduction techniques, etc.). The most common site of implantation is the fallopian tube. Clinically, it presents with the classic triad of symptoms of ectopic pregnancy, namely pelvic pain, metrorrhagia and the notion of amenorrhea. The usual strategy for diagnosis of ectopic pregnancy, including ectopic twin pregnancy, relies mainly on quantitative beta-HCG level and endo-vaginal ultrasound. We report a case of ectopic twin pregnancy, in a 24-year-old primiparous patient with a history of upper genital infection 2 years ago and whose treatment was a left salpingectomy.

Keywords: Ectopic pregnancy, twin ectopic pregnancy, salpingectomy.

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INTRODUCTION

Ectopic pregnancy (EP) is a group of clinical entities whose common point is their development outside the endometrial cavity. They are rare and represent about 2% of all pregnancies; their incidence in developed countries in the early 2000s was 100 to 175 EPs per year, per 100,000 women, aged 15 to 44 years. This corresponds to a ratio of approximately two EPs per 100 births [1].

The most places for occurring ectopic pregnancy (97% of cases) are the fallopian tubes including ampulla (55%), isthmus (25%), and fimbria (17%), and in 3% of patients, ectopic pregnancy occurs in the abdominal cavity, ovary, or cervix. Unilateral ectopic twin pregnancies are even rarer, representing only 0.5% of all ectopic pregnancies, with an estimated incidence of 1 in 20,000 [2].

Ectopic risk increases with the use of assisted reproductive technology (ART) procedures, and varies according to ART procedure type. The tubal twin ectopic pregnancy is a rare condition, and the first

unilateral tubal twin was reported by De Ott in 1891, and the first live twin tubal ectopic pregnancy was reported in 1944 [3]. A live tubal twin ectopic pregnancy is a very rare condition and among >100 reports of tubal twin pregnancies, till now, only 8 cases were live [2].

The timely diagnosis and treatment of women with tubal twin ectopic pregnancies is very important and can decrease the risk of tubal failure.

CASE REPORT

A 24-year-old primiparous woman with a history of an upper genital infection 2 years ago, under medical treatment, consulted for minimal blackish metrorrhagia with acute pelvic pain predominantly on the left side and amenorrhea of two months.

On physical exam, the patient was afebrile, and her vital signs were stable a Blood pressure at 10/6 and a heart rate at 100 bpm, it also found a sensitivity of the FIG, a violaceous gravid cervix with minimal dark bleeding (a closed cervical os) with a

uterus of normal size without palpable Latero-uterine mass.

Clinically, an ectopic pregnancy was suspected. The beta HCG level was 8,567 IU/l. Endo-vaginal ultrasound showed an empty uterus with a complex mass of left ectopic location with two separate gestational sacs associated (Fig. 1) with a moderate amount of fluid in favor of a ruptured left twin ectopic pregnancy. Left and right ovary was visualised and appears normal.

Spontaneous pregnancy there was no history of induction of ovulation by drugs or artificial reproductive techniques.

The patient was rushed to the operating room where she underwent a laparotomy under GA, which revealed a large hemoperitoneum with a ruptured left tubal Ectopic Pregnancy. The treatment was a left salpingectomy with respect of the ovaries and the contralateral fallopian tube.

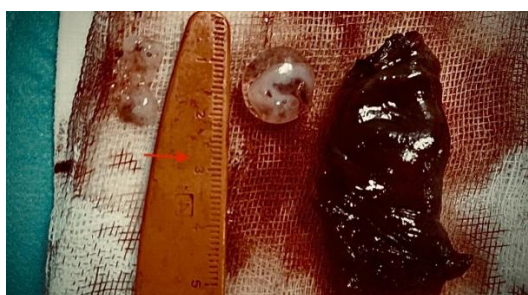


Fig1 (a, b): Intraoperative photograph shows the ruptured left tubal ectopic pregnancy with 2 distinct fetuses, before and after salpingectomy

The postoperative course was without particularities. The histopathological examination of the specimen confirmed the diagnosis of ruptured left tubal gemellar Ectopic Pregnancy.

DISCUSSION

After De Ott reported the first case of unilateral ectopic pregnancy in 1891, more than 100 cases have been reported to date and the incidence is steadily increasing.

This is mainly due to the rising incidence of pelvic inflammatory disease. Other contributing factors include advanced maternal age, assisted reproductive technology, tubal surgery, congenital anomalies, and sexually transmitted infections [4].

Ectopic twin EPs reported in the literature are usually associated with risk factors, as in our patient's case. These atypical ectopic pregnancies have been reported in the literature to have similar risk factors and severity criteria to classic ectopic pregnancies.

The most common site of implantation is the fallopian tube in approximately 95% of cases (3% ovarian location and the rest <1% abdominal, cervical or cornuate).

Cases of bilateral tubal ectopic pregnancies have also been reported. Therefore, the other fallopian tube should always be inspected meticulously [5-6].

The incidence of spontaneous twin EP is 1/90 [7]. Monochorionic and monoamniotic twin Ectopic Pregnancy are always unilateral; in contrast to dichorionic and diamniotic, which may be uni- or bilateral [4].

Most unilateral live twin tubal pregnancies are monochorionic and monoamniotic [12]. However, in our case, histopathology result revealed dichorionic and diamniotic twins.

Clinically, it presents with a classic triad of symptoms of ectopic pregnancy, including pelvic pain, metrorrhagia, and the finding of amenorrhea. The usual strategy for the diagnosis of ectopic pregnancy, including ectopic twin pregnancy, is essentially based on the combination of beta-HCG and endo-vaginal ultrasound.

Ultrasound evaluations have facilitated the early EP diagnosis which may lead to a reduction in maternal mortality and morbidity. Also, use of β -hCG assay, especially serial measurements, may improve these evaluations.

Indeed, the use of the discrimination threshold of plasma beta-hCG and the improvement of the resolution of ultrasound scanners have allowed early detection of Ectopic Pregnancy. Studies have shown that a β -hCG value higher than 1500 mIU / ml corresponds to a detection of about 91.5% of gestational sacs [8].

In our case, the plasma beta-hCG level was particularly high due to the fact that the EP was twin and therefore hypersecretory. The endo-vaginal ultrasound showed two separate gestational sacs, only one of which contained an embryo, associated with a moderate amount of effusion in favor of a ruptured twin ectopic pregnancy.

In 1994, Gualandi *et al.* [9] reported the first case of a bilateral unilateral tubal pregnancy with cardiac activity in both embryos, by endo-vaginal ultrasound.

Less than 12 unilateral twins Ectopic Pregnancy have been reported with positive cardiac activity in the two embryos [10] (It should be noted that it is not always possible to find two different sacs on endovaginal ultrasound in the earliest cases).

Treatment of EP depends on its clinical presentation, size, and β -h G level. Surgical management is indicated in the case of a ruptured EP in a patient who is hemodynamically unstable or after failure of medical treatment or in the case of any contraindications to this treatment.

Laparoscopy is the reference treatment, as it is associated with a reduction in operating time, shorter hospital stays and a faster recovery.

Salpingectomy is the recommended treatment. However, salpingostomy may be considered for women with a single uterine tube who wish to preserve their fertility. For unilateral tubal twin EPs, the surgical approach is generally the option reported in the literature [11]. In our case, we performed a left salpingectomy because the EP was ruptured and the fallopian tube was in a deteriorated condition.

CONCLUSION

Spontaneous twin tubal pregnancy can occur in patients with no known predisposing factors. Indeed, high-resolution transvaginal ultrasound is very helpful in the diagnosis of this condition.

Health care providers should have a high index of clinical suspicion for ectopic pregnancies. These are generally classified as conservative or surgical.

Laparoscopic salpingectomy is an effective treatment for unilateral tubal twin pregnancy with a short recovery time. Due to the lack of data in the literature, there are few recommendations on the appropriate management of an ectopic twin pregnancy.

REFERENCES

1. Bouyer, J. (2003). Épidémiologie de la grossesse extra-utérine: incidence, facteurs de risque et conséquences. *Journal de gynécologie obstétrique et biologie de la reproduction*, 32(7), 3S8-3S17.
2. Eddib, A., Olawaiye, A., Withiam-Leitch, M., Rodgers, B., & Yeh, J. (2006). Live twin tubal ectopic pregnancy. *International Journal of Gynecology & Obstetrics*, 93(2), 154-155.
3. Dede, M., Gezginç, K., Yenen, M., Ulubay, M., Kozan, S., Güran, Ş., & Başer, I. (2008). Unilateral tubal ectopic twin pregnancy. *Taiwanese Journal of Obstetrics and Gynecology*, 47(2), 226-228.
4. Eze, J. N., Obuna, J. A., & Ejikeme, B. N. (2012). Bilateral tubal ectopic pregnancies: a report of two cases. *Annals of African medicine*, 11(2), 112-115.
5. Ghanbarzadeh, N., Nadjafi-Semnani, M., Nadjafi-Semnani, A., Nadjafai-Semnani, F., & Shahabinejad, S. (2015). Unilateral twin tubal ectopic pregnancy in a patient following tubal surgery. *Journal of Research in Medical Sciences: The Official Journal of Isfahan University of Medical Sciences*, 20(2), 196.
6. Moini, A., Hosseini, R., Jahangiri, N., Shiva, M., & Akhoond, M. R. (2014). Risk factors for ectopic pregnancy: A case-control study. *Journal of research in medical sciences: the official journal of Isfahan University of Medical Sciences*, 19(9), 844.
7. Kazandi, M., & Turan, V. (2011). Multiple pregnancies and their complications. *Journal of Turkish Society of Obstetrics and Gynecology*, 8(1), 21-4.
8. Barnhart, K., Mennuti, M. T., Benjamin, I., Jacobson, S., Goodman, D., & Coutifaris, C. (1994). Prompt diagnosis of ectopic pregnancy in an emergency department setting. *Obstetrics and gynecology*, 84(6), 1010-1015.
9. Gualandi, M., Steemers, N., & De Keyser, J. L. (1994). First reported case of preoperative ultrasonic diagnosis and laparoscopic treatment of unilateral, twin tubal pregnancy. *Revue Francaise de Gynecologie et D'obstetrique*, 89(3), 134-136.
10. Kim, C. I., Lee, T. Y., Park, S. T., Kim, H. B., & Park, S. H. (2018). A rare case of spontaneous live unilateral twin tubal pregnancy with both fetuses presenting with heart activities and a literature review. *Obstetrics & Gynecology Science*, 61(2), 274-277.
11. Tam, T., & Khazaei, A. (2009). Spontaneous unilateral dizygotic twin tubal pregnancy. *Journal of Clinical Ultrasound*, 37(2), 104-106.
12. Storch, M. P., & Petrie, R. H. (1976). Unilateral tubal twin gestation. *American Journal of Obstetrics and Gynecology*, 125(8), 1148-1148.