

## CASE REPORT

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# Bilateral ruptured spontaneous extra-uterine pregnancy: About a case at the Thiès Regional Hospital Center

Gueye Lamine, M Thiam, O Thiam, P Alissoutin, AA Diouf, ML Cissé

## ABSTRACT

**Introduction:** Spontaneous bilateral tubal ectopic pregnancy is very rare and its ruptured form constitutes a life-threatening emergency. The diagnosis is sometimes very difficult. Surgical management consists of bilateral salpingectomy.

**Case Report:** We report the case of a 36-year-old multiparous patient who presented with metrorrhagia at eight weeks of amenorrhea with a positive pregnancy test. The ultrasound revealed a progressive right ectopic pregnancy of 8 weeks +2 days with the presence of a pseudo-gestational sac visible intrauterine and an effusion of moderate abundance. The diagnosis of ectopic pregnancy was made and the bilateral nature was demonstrated intraoperatively. A radical treatment was carried out with a favorable evolution.

**Conclusion:** Spontaneous bilateral ectopic pregnancy is a very rare situation, the diagnosis is often retrospective and the treatment is radical, such as bilateral salpingectomy.

**Keywords:** Bilateral ectopic pregnancy, Metrorrhagia, Salpingectomy

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## INTRODUCTION

Ectopic pregnancy is a gynecologic emergency with a high morbidity and mortality rate, and is the leading cause of maternal mortality in the first trimester. Its prevalence is 7.2% in Thiès [1], but in its bilateral form it remains very rare (1/200,000) [2, 3]. The diagnosis is sometimes very difficult depending on the context due to the lack of clinical specificity, and the management can compromise obstetrical prognosis. Medically assisted reproduction techniques are therefore an integral part of this management. We report here a case of ruptured bilateral spontaneous ectopic pregnancy managed at the El Hadji Amadou Sakhir Ndieguene Hospital in Thiès.

## CASE REPORT

The patient was 36 years old, 9th gestational age, 8th para, with 8 healthy live children and no known pathological history. She was admitted for gravid amenorrhea of 8 SA with a positive urine pregnancy test. Physical examination on admission revealed stable hemodynamics, signs of peritoneal irritation, and minimal metrorrhagia. On digital vaginal examination, the uterus was enlarged and painful on mobilization, with the perception of two tender latero-uterine masses. Culdocentesis yielded incoagulable lysed blood. Ultrasound examination revealed an evolving right ectopic pregnancy of 8 weeks +2 days (Figure 1), with an intrauterine pseudo-gestational sac visible (Figure 2), and an effusion of moderate size. Blood tests showed microcytic hypochromic anemia at 9 g/dL. An emergency laparotomy was performed. Surgical exploration revealed a bilateral ectopic pregnancy: a ruptured right ampullary of 9 × 6 cm, a ruptured left ampullary of 6 × 4 cm (Figure 3).

The preoperative assessment found anemia at 9 g/dL. The ovaries were macroscopically normal. Bilateral retrograde total salpingectomy was performed. She

also benefited from intrauterine manual aspiration immediately postoperatively for uterine evacuation. The operating parts (Figure 4) were sent for anatomico-pathological study. The postoperative course was complicated by microcytic hypochromic anemia at 7.8 g/dL. The patient was discharged at post-op day 5.

Histological examination of the surgical specimens confirmed a bilateral tubal ectopic pregnancy.

## DISCUSSION

In our patient's case, the ectopic pregnancy was spontaneous, as there was no evidence of medication or assisted reproduction techniques. Ovarian stimulation is generally suspected in such cases, but the high prevalence of herbal medicine in our social context means that we cannot formally rule out drug-induced stimulation.

In its bilateral form, the possible etiologies are either bilateral multiple ovulations, or transperitoneal migration of trophoblastic cells from an ectopic pregnancy with implantation in the other tube [4]. However, the mechanism is difficult to pinpoint, as diagnosis is often delayed.

Although the clinical signs are not very different from the classic form, preoperative diagnosis of the bilateral form is more difficult, as this clinical picture is so exceptional that it is not routinely considered. In addition, the emergency context does not leave enough time for further investigations. In our case, the diagnosis was made intraoperatively despite a preoperative ultrasound scan showing an ectopic pregnancy and a gestational pseudo-sac.

Laparoscopy is the gold standard for the management of ectopic pregnancy [5]. In our context, laparotomy is justified because the endoscopy column is not available in the obstetric emergency department. Open surgery has also been described, but remains the preserve of developing countries.

Conservative treatment can be envisaged in unruptured forms, but the risk of recurrence is high. We opted for radical treatment in our patient because of the local condition of the fallopian tubes and the patient's desire for permanent sterilization prior to surgery. Cases reported in the literature have also benefited from bilateral salpingectomy [6–8].

## CONCLUSION

In an emergency situation, preoperative diagnosis of bilateral ectopic pregnancy is difficult, and laparotomy is justified in the absence of an endoscopy column. Intraoperative inspection of the contralateral adnexa must be systematic and meticulous, even in the case of a classic ectopic pregnancy. Treatment is surgical, with bilateral salpingectomy indicated in the event of rupture. Assisted reproduction remains an option in cases where pregnancy is desired.

## REFERENCES

1. Gueye L, Thiam M, Niang MM, Ba PA, Mahammat S, Cisse ML. Ectopic pregnancy at the Thiès (Sénégal) regional hospital: A study of diagnostic, therapeutic and prognostics. *Austin J Obstet Gynecol* 2017;4(2):1073.



Figure 1: Ruptured right ampullary ectopic.



Figure 2: Pseudo-gestational sac.

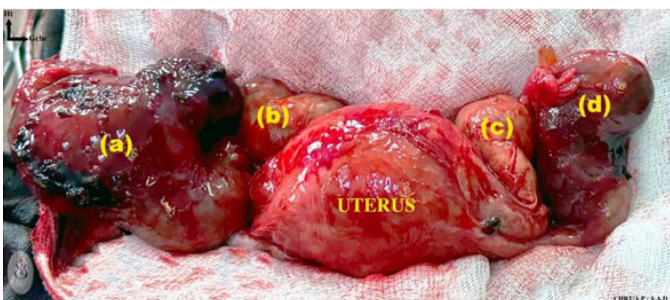


Figure 3: Bilateral ectopic pregnancy.

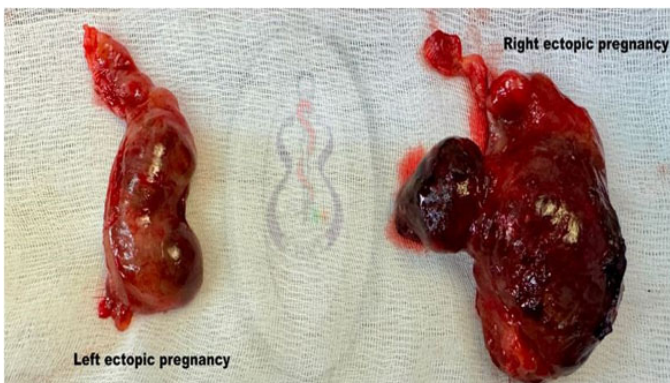


Figure 4: Operating parts.

2. Olive DL, Taylor N, Cothran GE, Schenken RS. Gamete intrafallopian transfer (GIFT) complicated by bilateral ectopic pregnancy. *Fertil Steril* 1988;49(4):719–20.
3. Rizk B, Morcos S, Avery S, Elder K, Brinsden P, Mason B, Edwards R. Rare ectopic pregnancies after in-vitro fertilization: One unilateral twin and four bilateral tubal pregnancies. *Hum Reprod* 1990;5(8):1025–8.
4. Tabachnikoff RM, Dada MO, Woods RJ, Rohere D, Myers CP. Bilateral tubal pregnancy. A report of an unusual case. *J Reprod Med* 1998;43(8):707–9.
5. Tall A. Prise en charge d'une grossesse extra-utérine tubaire bilatérale au Centre Hospitalier National de Pikine, Dakar (à propos d'un cas). Thèse UCAD N°263. 2021.
6. Andrews J, Farrell S, Andrews J. Spontaneous bilateral tubal pregnancies: A case report. *J Obstet Gynaecol Can* 2008;30(1):51–4.
7. Amine BHH, Haythem S. Extra-uterine twin pregnancy: Case report of spontaneous bilateral tubal ectopic pregnancy. *Pan Afr Med J* 2015;20:435.
8. Ghomian N Md, Lotfalizadeh M Md. Spontaneous unruptured bilateral tubal pregnancy: A case report. *Iran J Med Sci* 2015;40(6):537–40.

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### Author Contributions

Gueye Lamine – Conception of the work, Design of the work, Acquisition of data, Analysis of data, Interpretation of data, Drafting the work, Revising the work critically for important intellectual content, Final approval of the version to be published, Agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved

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### Consent Statement

Written informed consent was obtained from the patient for publication of this article.

### Conflict of Interest

Authors declare no conflict of interest.

### Data Availability

All relevant data are within the paper and its Supporting Information files.

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