

## Paucisymptomatic Ovarian Pregnancy Diagnosed at the Moroccan Military Field Hospital in the Zaatari Camp for Syrian Refugees

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### Abstract

Ovarian pregnancy accounts for 2 to 3% of ectopic pregnancies. It is independent of other usual extra uterine pregnancy risk factors. Its physiopathology remains unclear; it can evolve until the second trimester or even term. The diagnosis is difficult; it is often made perioperatively and confirmed by histology. Despite the progress of medical treatment, surgery remains the best way for therapeutic management. We report a case of paucisymptomatic ovarian pregnancy successfully managed at the Moroccan Military Field Hospital in the Zaatari Camp with a literature review.

**Keywords:** Ovarian pregnancy, perioperative diagnosis, conservative surgical treatment.

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### INTRODUCTION

Extra-uterine pregnancy (EUP) is one of the most common medical-surgical emergencies in gynecology. The ovary represents 3% of EUP [1-3]. The preoperative diagnosis is difficult because clinical semiology and ultrasound signs are poor. Its therapeutic management is surgical.

The objective of this case is to highlight the difficulty of the etiological diagnosis, through a new observation of a paucisymptomatic ovarian pregnancy in a Syrian refugee in the Moroccan hospital in Zaatari camp.

### Case Presentation

An 18-year-old woman, second gestation, primiparous, 0 RH +, without medical or surgical history. Her menstrual cycle is regular, with no contraceptive method having given birth 18 months ago vaginally without complications. She was admitted for acute pain of the right iliac fossa of low intensity, brutal installation without associated bleeding in a context of

amenorrhea of 08 weeks. The patient was afebrile, her blood pressure was 120/80 mmHg, the heart rate was 79 beats / min, respiratory rate was 17cycles / min. The abdominal examination was slightly sensitive at the level of the right iliac fossa. Speculum examination showed a healthy-looking cervix without bleeding. The vaginal examination revealed the presence of a painless right lateral uterine mass without Douglas' cry. Ultrasonography detected an empty uterus with a thick endometrium at 16 mm, a 45 mm heterogeneous right lateral uterine image, without effusion at the Douglas pouch (Figure-1). The assay of  $\beta$ HCG was positive at 1650 mIU / ml.

A mini-laparotomy was performed demonstrating an unbroken right ovarian pregnancy (Figure-2). Enucleation of the trophoblastic product was performed with good hemostasis (Figure-3); histological data confirmed the diagnosis. The  $\beta$ HCG control performed 48 hours postoperatively was negative. The postoperative consequences were simple.



**Fig-1: Ultrasound appearance showing a right lateral-uterine image**



**Fig-2: Intraoperative diagnosis of a right ovarian pregnancy**



**Fig-3: Conservative surgical treatment by enucleation of the trophoblastic product**

## DISCUSSION

Ovarian pregnancy - especially of right localization - accounts for 3% of all ectopic pregnancies [1-3]. Its physiopathology is poorly known, several hypotheses oppose:

- Ovarian pregnancies after in vitro fertilization reinforce the theory of transtubal reflux from the oocyte fertilized to the ovary [4].
- The IUD alters tubal motility, thus facilitating ovarian implantation [5-7].
- The follicular and juxta follicular forms of ovarian pregnancy are explained by the

preferential implantation of pregnancy on the scar of the original follicular ostium, rich in fibrin and neocapillary [7].

- Sometimes this implantation will be done away from the corpus luteum or even on the contralateral ovary, corresponding to the juxta cortical and interstitial forms.
- More rarely, ovarian pregnancy may be bilateral or part of a heterotopic pregnancy [8].

According to the term of pregnancy, most ovarian pregnancies are abortives before the 12 weeks

of amenorrhea [1]. Some ovarian pregnancies can evolve until 2nd trimester or even more advantage [9]. Shahabuddin and Chowdhury had one case of ovarian pregnancy in a heterotopic pregnancy, reaching the end [10]. Clinically, it does not differ from other ectopic pregnancies, associating pelvic pain, amenorrhea and metrorrhagia. Her clinical presentation can range from a simple pelvic algia - as the case our patient - to a state of hemodynamic shock [11]. Ultrasonographic diagnosis remains difficult; sometimes the presence of ovarian parenchyma as a corpus luteum or a follicle surrounding the mass that has a higher echogenicity than that of the ovary is leading to diagnosis [12]. The tubal pregnancy and the yellow corpus hemorrhagic are the two main differential diagnoses. Only surgery can make the diagnosis which is confirmed by the histological study of the operative specimen. The standard treatment is conservative surgical treatment with laparoscopy with enucleation of the gestational sac or partial ovarian resection [13]. In rare cases and because of the advanced age of ovarian pregnancy, ovariectomy or even adnexectomy may be required [13]. Laparotomy keeps its indication in front of a major haemoperitoneum with an unstable hemodynamic state. Medical treatment with methorexate by intramuscular or in situ injection may rarely be an alternative to surgery [13]. Ovarian pregnancy, because of the absence of tubal involvement, is not a risk factor for a new uterine pregnancy. Only one case of recurrence has been reported in the literature and concerned the contralateral ovary [14].

## CONCLUSION

Ovarian pregnancy, although rare, remains an obstetric emergency with a particular clinical and radiological semiology. His diagnosis is difficult; it is often done perioperatively and confirmed by histology. His therapeutic management remains surgical.

## DISCLOSURE

This case report was written based on clinical observation without any funding.

## Conflicts of Interest

There are no conflicts of interest between the authors and between the authors and the patient.

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