

 <p>ISSN NO. 2320-5407</p>	<p>Journal Homepage: - <a href="http://www.journalijar.com">www.journalijar.com</a></p> <h2 style="text-align: center;">INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)</h2> <p style="text-align: center;">Article DOI: 10.21474/IJAR01/21295 DOI URL: <a href="http://dx.doi.org/10.21474/IJAR01/21295">http://dx.doi.org/10.21474/IJAR01/21295</a></p>	
---	---	---

### RESEARCH ARTICLE

## OVARIAN PREGNANCY: APROPOS OF A CASE

Tossi Sara, Nouri Meriem, Imami Youssef, Mohamed Jalal, Lamrissi Amine and Samouh Naima

#### Manuscript Info

##### Manuscript History

Received: 06 May 2025

Final Accepted: 09 June 2025

Published: July 2025

#### Abstract

**Introduction:** Ovarian pregnancy (ON) is a rare form of pregnancy where the ovary is the site of embryo implantation. Among the 5% of extra-tubal pregnancies, ovarian pregnancy alone represents 2% of these cases, apart from rare locations [6].

**Case Report:** We report a rare case of spontaneous ectopic ovarian pregnancy of a 38-year-old woman, diagnosed with a ovarian pregnancy by ultrasound and treated by laparotomy in emergency obstetrical department of Ibn Rochd University Hospital of Casablanca.

**Clinical Discussion:** The discovery of ovarian pregnancy dates back to 1614, thanks to the work of Mercurius and other researchers cited by Grall Women at risk of ovarian pregnancy are generally young, fertile, multiparous and IUD carriers The most common clinical symptoms are abdominal pain, menstrual delays and uterine bleeding. These pains are caused by the rupture of the ovarian capsule and the formation of a hemoperitoneum The therapeutic management of an ectopic pregnancy depends on several factors, such as the location of the pregnancy.

**Conclusion:** Ovarian pregnancy (GO) is uncommon and remains a rare event compared to other types of GEU.

"© 2025 by the Author(s). Published by IJAR under CC BY 4.0. Unrestricted use allowed with credit to the author."

#### Introduction:-

Ovarian pregnancy (ON) is a rare form of pregnancy where the ovary is the site of embryo implantation. [1] It differs from other ectopic pregnancies by its rarity and is often observed in countries with low socio-economic and medical development. [2]. The pathophysiology of SM is not well understood, but it appears to be caused by reflux from the fertilized oocyte to the ovary [3, 4]. SM is a rare and isolated phenomenon, independent of the usual risk factors. The objectives of this study are to analyze the determinants of SM and to highlight its etiopathogenic, histopathological and evolutionary peculiarities [5].

#### Observation:-

Patient aged 38 years, multiparous, known diabetic under diet alone, admitted to the emergency room for metrorrhagia of medium abundance on an amenorrhea of 3 months. The examination finds a patient unstable hemodynamically tachycardia, 90/50 mmHg BP, generalized cutaneous mucosal pallor, sweat, slightly distended abdomen, with generalized edema, bleeding of endometrial origin. Objective pelvic echography of an empty normal-sized uterus, a back-uterine gestational sac measuring 78x47mm containing a non-living embryo whose biometric evaluation evaluates the pregnancy of 7 SA associated with an effusion of great abundance. With a BHCG rate of 79835. She benefited from emergency

laparotomy, exploration showed a hemoperitoneum estimated at 2.5 liters, a right ovarian pregnancy (FIGURE 1). She had a right ovariectomy. (FIGURE 2).



### Discussion:-

Among the 5% of extra-tubal pregnancies, ovarian pregnancy alone represents 2% of these cases, apart from rare locations [6]. The discovery of ovarian pregnancy dates back to 1614, thanks to the work of Mercurius and other researchers cited by Grall [7].

Women at risk of ovarian pregnancy are generally young, fertile, multiparous and IUD carriers [8]. According to the literature, the age of the patients concerned varies from 21 to 44 years, with a parity ranging from 0 to 3 [9]. Older age appears to be associated with a higher risk of ectopic pregnancy due to prolonged exposure to risk factors [10].

Novak [11] presents the three main theories advanced to explain the pathogenesis of SM, including two concerning primitive SM. The first theory suggests intra follicular fertilization, where an egg that is not expelled would be fertilized inside a follicle that is not ruptured by a sperm. However, this theory seems wrong because the oocyte must undergo a nuclear and cytoplasmic maturation to be fertilizable, processes that take place outside the follicle. The second theory, proposed by Baden and Heins [12], speaks of extra-follicular fertilization followed by ovarian nidation, where the egg is preferably implanted on the scar of the original follicular ostium containing fibrin and neocapillaries.

The most common clinical symptoms are abdominal pain, menstrual delays and uterine bleeding. These pains are caused by the rupture of the ovarian capsule and the formation of a hemoperitoneum [13,14]. There are other symptoms to guide the diagnosis [15]: digestive disorders, abdominal and pelvic pain, anemia with impairment of the general state, internal or externalized hemorrhage, or a toxic-infectious syndrome. Patients are most often seen in an emergency context, with significant hemoperitoneum or even in a state of hypovolemic shock [14], these are signs reported in our context.

Ultrasound is an essential tool to confirm the diagnosis by visualizing a fetus surrounded by a gestational sac outside the uterus. In addition, it assesses the vitality of the fetus and the location of the placenta [16]. Biology may indicate anemia and elevated levels of alpha fetal protein. [17] Diagnosis is often also confirmed intraoperatively.

The therapeutic management of an ectopic pregnancy depends on several factors, such as the location of the pregnancy, the state of health of the patient and the desire for future pregnancy. It may include close monitoring, administration of drugs to stop embryogrowth, or surgery to remove the embryo [18].

In most cases, treatment is usually surgery. In case of advanced ovarian pregnancy, an ovariectomy or an annexectomy may be performed. However, partial resection of the ovary can be performed to ensure hemostasis [16,19,20].

It depends in large part on the speed of diagnosis, management attitude, location of pregnancy, age of pregnancy [17]. Maternal morbidity is marked by bleeding and operative complications [21].

### Conclusion:-

Ovarian pregnancy (GO) is uncommon and remains a rare event compared to other types of GEU. Its underlying cause is still poorly understood, making its diagnosis complex and requiring a specific approach. However, early detection and management can improve the prognosis of this exceptional condition.

### References:-

1. Chahtane A, Dehaymi M, Rhrab B, Kharbach A, El Armani S, Chaoui A. Ovarian pregnancy: about 14 observations with literature review. French Journal of Obstetrics. 1993;88(1):35–38.
2. POIZAT R, LEWIN F- Ectopic pregnancy after the 5th month. Encyclical Journal of Obstetrics, D 10; 5- 1982 : 50-69.
3. Kraemer B, et al. Ovarian ectopic pregnancy: diagnosis, treatment, correlation to Carnegie stage 16 and review based on a clinical case. Fertil and Steril. 2009;92:392. [
4. Sergeant F, Mauger - Tinlot F, Gravier A, Verspyck E, Marpeau L. Ovarian pregnancy: re-evaluation of diagnostic criteria. J Gynecol Obstet Biol Reprod. 2002;31(8):741–746.
5. Alto, W.A. (1990) Abdominal Pregnancy. American Family Physician, 41, 209-214.
6. Duchamp de Chastaigne M, Mezin R. Association abdominal pregnancy - intrauterine pregnancy in the third trimester: about a case and review of the literature. J Gynecol Obstet Biol Reprod. 1994;23(4):440–443.
7. Grall J, Jacques Y. Ovarian pregnancy: about four cases. French Journal of Gynecology. 1978;73(2):139–145.

8. Hebertsson G, Magnusson SS, Benediktsdottir K. Ovarianpregnancy and IUCD use in a definedcomplete population. *Acta ObstetGynecolScand.* 1987;66(7):607–610.
9. Picaud A, Ella-Ekogha R, Ozouaki F, Nlome-Nze AR, et al. Abdominal pregnancy: about 11 cases. *Black African Med.* 1990;37(8/9):483–487.
10. Gervaise A, Fernandez H. The first trimester of pregnancy. *Journal of Obstetrics and Reproductive Biology.* 2010 May;39(n° 3S):F17–F24.
11. Novak E. *Gynecologic and ObstetricPathology.* 3rd edition. Philadelphia: WB Saunders; 1952.
12. Baden, Heins. Ovarianpregnancy. *Amer J ObstetGynec.* 1952;64:353–358.
13. Grimes H, Nosal R, Gallagher J. Ovarianpregnancy:aserie of 24 cases. *ObstetGynecol.* 1983;61(2):174–180.
14. Ercal T, Cinar O, Mumcu A, Lacin S, Ozer E. Ovarianpregnancy:relationship to an intrauterinedevice. *Aust N Z J ObstetGyneacol.* 1997;37(3):362–364.
15. Bouzid F, Cellami D, Baati S, Chaabouni M, et al. Abdominal pregnancy. *Rev Fr GynécolObstétr.* 1996;91:616–618.
16. DalendaChelli, Chaima Gatri, Fethia Boudaya, Karim Guelmami, Béchir Zouaoui, EzzeddineSfar, Mohamed BedisChennoufi, Héli Chelli. Experience of a multidisciplinarycomittee in the managementofsuperficialvenousmalformations: 99 cases. *TunisiaMedicale.* 2009;87(n°011):797–780.
17. Razafindranovona Th. Ann., Mad. RandriamahefaUniversity; pp. 185–202. (medicine) -T3-V1- (1965)
18. Costa, S.D., Presley, J. and Bastert, G. (1991) Advanced Abdominal Pregnancy. *Obstetrical&Gynecological Survey*, 46, 515-525.
19. Gaubert P, Dufour P, Devisme L, Massoni F, Querleu D. Ovarianpregnancy: about an observation. *La Presse Médicale.* 1999 December;28(No. 38):2103.
20. Marcus SF, Brinsden PR. Primaryovarianpregnancyafter in vitro fertilization and embryotransfer: report of seven cases. *FertilSteril.* 1993;60(1):167–9.
21. Jacob F, Helmer J, Perrier JF, Vedel M, Hauger C. Hemorrhagicdelivery in termabvdominalpregnancywith live child. *Ann frAnesthRean.* 1986;5(4):450–452.