

Ovarian Pregnancy: A Case Report

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Abstract: Ovarian pregnancy is rare: 1-6% of ectopic pregnancies. It remains an isolated and exceptional phenomenon in the life of a woman, independent of traditional risk factors and the exact mechanism leading to ovarian pregnancy is poorly understood. Histological study authenticates the diagnosis, sometimes referred intraoperatively. We report the case of a 34 year old patient is referred for isolated pelvic pain at 6 weeks of gestation. Physical examination was unremarkable. The vaginal ultrasound shows a juxtaposition ovarian picture right. Surgical exploration highlights a moderate hemoperitoneum and a right ovary with an ectopic pregnancy. A wedge resection of the right ovary is performed. The postoperative course was uneventful; the patient being output to the second day. The pathological examination of the surgical specimen confirmed the diagnosis of ovarian pregnancy juxtaposition follicular type.

Keywords: Ovarian pregnancy, primipare, Rare ectopia , ultrasound, surgical treatment.

INTRODUCTION

Ovarian pregnancy is a special form of ectopic pregnancy (EP). Described for the first time by Mercurus in 1614 and confirmed by the work of Van Tussenbrock and Spiegelberg in 1878 [1]. The diagnosis is based on four clinic pathological criteria:

- The tubes are free on both sides;
- The gestational sac occupies the anatomical site of the ovary;
- Ovarian and GEU are connected to the uterus by the utero-ovarian ligament;
- Presence of ovarian tissue in the wall of the gestational sac.

Through a literature review and a case compiled in gynecology obstetrics From a CHU Ibn ROCHD of Casablanca authors put an update on this rare condition [2].

CASE REPORT

Mrs G. K, 34-old with no notable medical history, second gesture primipare at regular cycle, oral contraceptives (microprogestatifs), admitted to the department for pelvic pain associated with amenorrhea of 6 weeks. The onset of symptoms goes back five days before admission by a progressively worsening pelvic

pain not relieved by symptomatic treatment without bleeding or digestive or urinary problems. The review found a patient in fairly good condition, normotensive. On palpation there is a pelvic tenderness on the right side. The speculum examination cervix is healthy without bleeding. The pelvic, painful to touch, the uterus is of normal size, a right latero-uterine mass of about four centimeters very sensitive [3, 4]. Before the clinical picture and the notion of amenorrhea, the diagnosis of ectopic pregnancy is strongly evoked. The dosage of Bhcg is a rate higher than a rate equal to 4950UI / ml. The trans-abdominal and pelvic ultrasound endovaginal is a line of fine uterus is empty; a heterogeneous mass latero-uterine embryo measuring 41mm without echo, Douglas is home to a low abundance effusion. [7, 8].

A laparoscopic exploration has been performed, and surgical exploration notes sound tubes with a rounded mass contiguous to the right ovary. Both tubes and the contra lateral ovary are without anomalies the peritoneal effusion is estimated at 150 cc made of black blood. Excision of the mass is achieved. Hemostasis is made by a continuous suture. Pathological examination confirmed the diagnosis of pregnancy ovarienne [6, 5].



Fig. 1: Intraoperative appearance of an ovarian pregnancy

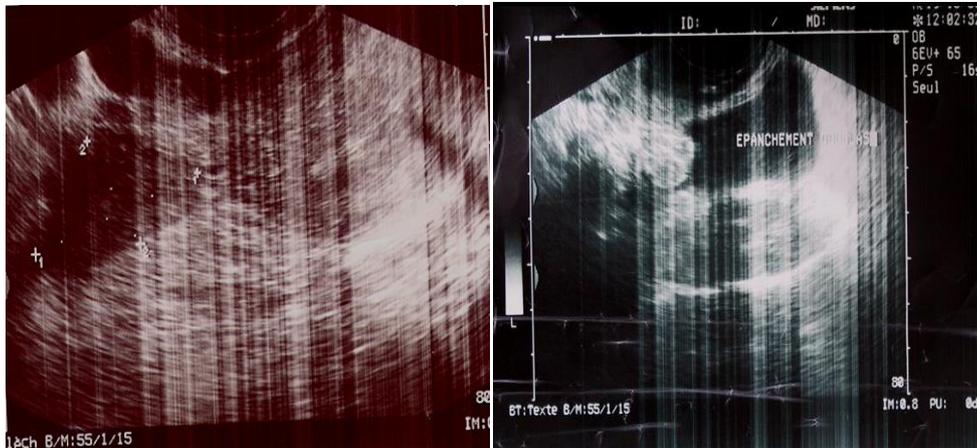


Fig. 2: Pelvic Ultrasound: latero-uterine mass with effusion of Douglas

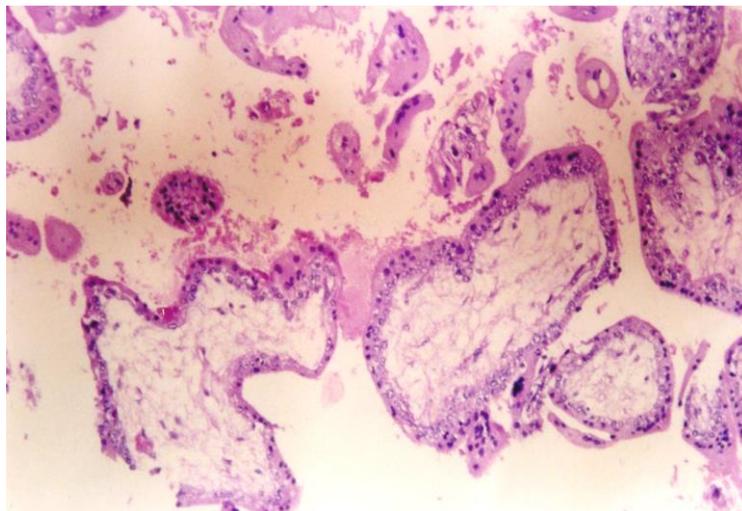


Fig. 3: Histology with x100 magnification

DISCUSSION:

Ovarian pregnancy (GO) is a rare pathology, diagnosis difficult. Currently the frequency of GO is 2to 3% contre1% before 1970 [9, 10].The pathophysiology

of GO is poorly understood. It seems that transtubaire reflux to the ovarian fertilized oocyte may be at the origin GO. Pregnancy preferentially implanted on the scar of the follicular ostium of origin, rich in fibrin and

néocapillaires. More rarely, this implementation will be done remotely luteum or even on the contralateral ovary.

Infertility, nulliparity, the endometriosis or pelvic inflammatory lesions do not constitute predisposing factors for ovarian pregnancy. Ovarian pregnancy is a unique event occurring in a "normal" woman [11, 12]. Several authors note that the GO is frequently associated with the presence of an IUD in 57-90% of cases. By contrast, for others, the use of the IUD does not appear to increase the risk of occurrence of a GO [13]. In vitro fertilization seems to be a growing contrast etiological factor, 5% of pregnancies obtained after IVF with secondary embryo transfer into the uterine cavity are ectopic and 6% of them are located within the ovary. Clinically GO shows no fundamental distinction compared to tubal ectopic pregnancy. However, the abdominal/pelvic pain symptoms dominate. It corresponds to the rupture of the ovarian capsule by the GO and the constitution of the hemoperitoneum. Patients are usually seen in an emergency context, in shock [15]. The bleeding cardinal sign of tubal ectopic pregnancy are less frequent. When they are present, they are scarce. In the GO, the tubes are not affected by the ovular implantation; there is little or no bleeding of exteriorization [14].

At an advanced gestational age, the clinical picture is identical with that of an abdominal pregnancy. Biologically, the dosage of the plasma beta HCG allows the diagnosis of pregnancy without prejudice to its location [16]. The trans abdominal ultrasound and / or transvaginal is not always relevant to differentiate from other forms of GO GEU. It can highlight a gestational sac adjacent to the ovary or as some described it, a double hyper echoic ring in a latero-uterine hypo echoic mass [17]. The most important consideration remains laparoscopy because it only allows to visualize the lesion and to practice excision.

Histological examination of the ovarian lesion will confirm the diagnosis by demonstration of chorionic villi penetrating the ovary and / or the recognition of the implantation of the egg box. Depending on the location of implantation of the egg, 4 anatomical varieties of GO can be defined:

- Intra-follicular pregnancy nidée to the inner face of the corpus luteum
- The juxtaposition follicular pregnancy implanted in the follicular scar and overflowing on ovarian cortex
- The juxtaposition cortical pregnancy completely attached to the cortex
- Interstitial pregnancy where the egg is completely embedded in the ovary

Sometimes it is difficult for the pathologist to identify the chorionic villi when they are often limited in number coagulated by the surgeon, within fibrin clots or cruriques-luteal tissue. This calls for a redefinition of the diagnostic criteria for GO also taking into account, if the pathological examination is not contributory, the clinical context and evolution after treatment.

Definitive diagnosis of GO may well be based on the following four criteria associated concomitantly:

- Existence of GEU affirmed by a plasma β hCG ≥ 1000 IU / l associated with a vaginal ultrasound uterine cavity, false early spontaneous layer being excluded by the absence or the low volume of bleeding
- Infringement ovarian confirmed by surgical exploration with bleeding or trophoblast visualization to his level or the presence of atypical ovarian cyst
- Presence of healthy fallopian tubes
- Decay and negativity in plasma β hCG after treatment of ovarian cancer

The differential diagnosis is little to do with

- The USG associated with a corpus luteum cyst
- The GEU suburban spontaneously aborted in the peritoneum with attachment of trophoblastic implants on ovarian cortex
- An ovarian cyst, functional or organic type associated with an intrauterine pregnancy

Due to the absence of tubal reached, before and after the occurrence of GO, GO does not constitute a new risk factor for USG. The treatment of these young women will be the Conservative maximum as opposed to the old oophorectomy. If young ovarian pregnancy and if the hemodynamic status of the patient is stable, laparoscopic surgery is recommended. The act is a cystectomy or partial resection of the ovary carrying the egg, to best preserve the fertility of the patient. In rare cases, due to the advanced development of pregnancy ovariectomy or adnexectomy remain necessary during a laparotomy

Medical treatment of ovarian pregnancy methotrexate base has been described. Shamma in 1992 described the first case of GO successfully treated with MTX. A single dose IM 50 mg / kg is injected. However, given the late diagnosis of pregnancy, most often associated with hemoperitoneum, medical treatment is cons-indicated [18].

To accept MTX therapy, Annunziata offers the following criteria: bag less than 30 mm in diameter and

no visible embryo (<6 SA). Note that the MTX can be used in addition to surgery. The questions then optimize the laparoscopic treatment in medically blocking the development potential trophoblastic residues.

CONCLUSION:

Ovarian pregnancy is a rare form of ectopic pregnancy, however, currently marked increase. The diagnosis of GO before surgical exploration is currently rarely mentioned. Laparoscopy with conservative treatment should be performed. If GO large and / or major hemoperitoneum laparotomy and / or ovariectomy can be realized. The combination of medical treatment to surgical treatment is interesting. The subsequent fertility prognosis for these patients looks excellent

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