

A CORNUAL PREGNANCY AFTER SALPINGECTOMY: A CASE REPORT**Benaouicha Nisrine*¹, Louzali F. Z.¹, Badsa Safae¹, Zeraiidi Najia¹, Pr lakhdar Amina¹, Aicha Kharbach² and Baydada Aziz¹**¹Gynecology-Obstetrics and Endoscopy Department, Maternity Souissi/ University Hospital Center IBN SINA, Rabat Morocco.²Gynecology-Obstetrics and Endocrinology Department, Maternity Souissi/ University Hospital Center IBN SINA, Rabat Morocco.***Corresponding Author: Benaouicha Nisrine**

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ABSTRACT

A cornual gestation is one of the most hazardous types of ectopic gestations, which accounts for 2 – 4% of all the ectopic pregnancies and it has a mortality rate which is 6 – 7 times higher than that of the ectopics in general. The diagnosis and the treatment of such a pregnancy is challenging and it constitutes an urgent medical situation. We report in this work a case of a 27 year old nulliparous patient with a history of salpingectomy for a tubal ectopic pregnancy who presented to the emergency room with EP and the surgical exploration showed a cornual pregnancy.

KEYWORDS: Cornual pregnancy, interstitial pregnancy, laparotomy, cornuotomy.**INTRODUCTION**

The incidence of ectopic gestation is approximately 20 per 1000 pregnancies, having increased more than 4-fold in the last 20 years. Complications related to this disorder are the most common cause of maternal death in the first trimester of pregnancy. CP is a rare entity in the general population, particularly in spontaneous pregnancies, and accounts for 2–4% of ectopic pregnancies,^[1] CP are defined by their implantation site and are found in the interstitial region between the proximal portion of the fallopian tube and the musculature of the uterus. A cornual pregnancy can be further sub-classified as either “angular” or “interstitial.” An angular pregnancy is one that implants medial to the insertion of the round ligament as it crosses the utero-tubal junction; an interstitial pregnancy is one that implants lateral to the round ligament at this junction.^[2] Most authors, however, use the terms “cornual” and “interstitial” interchangeably. The rupture of interstitial pregnancies is particularly hemorrhagic because of a rich cornual vascularisation and myometrial distension due to a more advanced pregnancy.

CASE REPORT

A 27-year-old woman, gravida 2, para 0, with a history of left Fallopian tube pregnancy 3 years ago, which was successfully managed by salpingectomy of the right side, No history of smoking, alcohol, allergies, or medications was reported. G2: current pregnancy estimated at 7

weeks. The patient was brought to the emergency room with severe lower abdominal pain that began approximately 1 day ago and had progressively worsened and minimal black metrorrhagia associated with nausea and vomiting.

The examination on admission found a conscious, polypneic, afebrile pale patient with blood pressure: 100/60 mm Hg, pulse rate: 100/min, abdominal examination finds diffuse pelvic pain on palpation, gynecological examination finds a closed cervix with minimal black bleeding and sensitivity to mobilization of the uterus on vaginal touch.

A biological check-up has been performed: BHCG: 3400 UI/l Hb: 10g/dl the abdomino-pelvic ultrasound found a minimal intra-abdominal effusion with an empty uterus a thickened endometrium and a left cornual pregnancy with embryo without cardiac activity (Fig1).

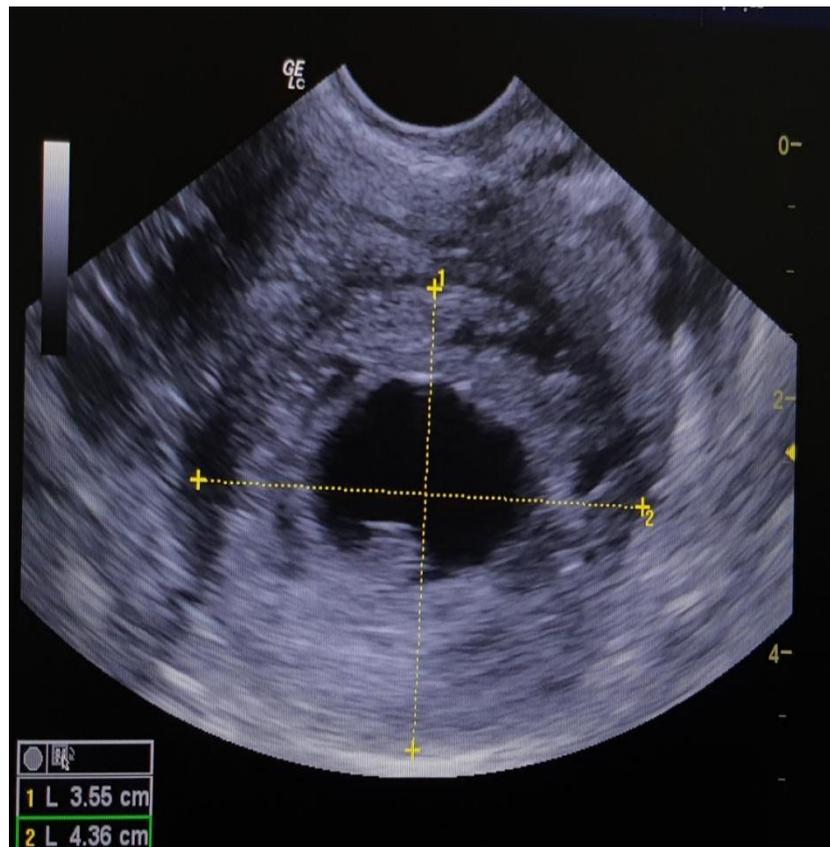


Fig. 1: Lateral uterine mass suggesting a left cornual pregnancy.

An emergency exploratory laparotomy was performed via a Pfannenstiel incision, it found a left cornual ectopic pregnancy with minor hemoperitoneum. (Fig 2).



Fig. 2: left cornual pregnancy.

The procedure performed was the following: cornuotomy with aspiration of the conception product with uterus repair, (Fig3) aspiration of the hemoperitoneum, verification of the left annex which was of good quality the postoperative course was normal and the patient was discharged from the hospital after 4 days

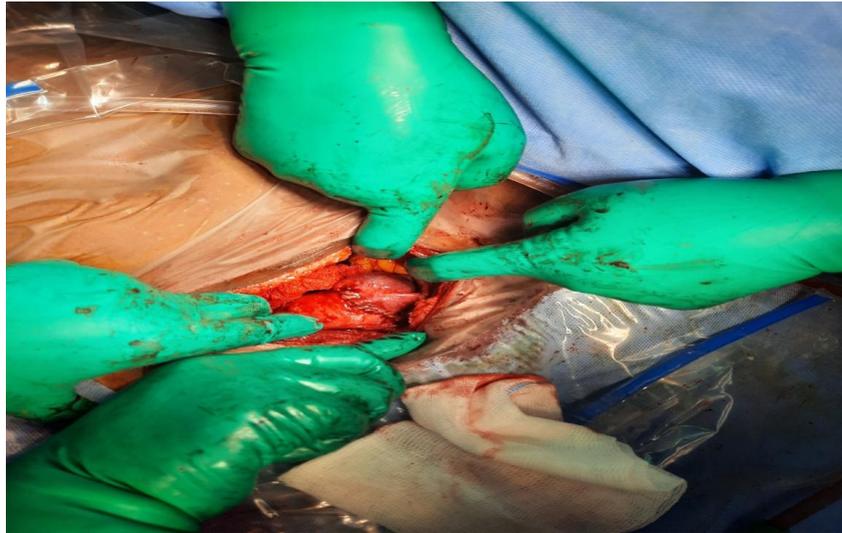


Fig. 3: cornuotomy with uterus repair.

DISCUSSION

Cornual (interstitial) ectopic pregnancy is an uncommon variant of ectopic pregnancy which often poses a diagnostic and therapeutic challenge to the clinician. These cases may rupture with massive bleeding. Risk factors of CP include previous ectopic pregnancies, assisted reproductive techniques, tubal anomaly, proximal intra-tubal adhesions, and rarely ipsilateral salpingectomy.^[4,5]

Cornual pregnancy remains one of the most difficult gestations to diagnose and treat. The symptoms usually occur 9th to 12th weeks after the LMP due to myometrial stretchability. These include discomfort, abdominal pain, and abnormal vaginal bleeding. Despite its complexity, early diagnosis of CP poses the cornerstone of lowering maternal mortality.^[8] Clinical features, increased β -HCG, and transvaginal ultrasonography are considered typical diagnostic modalities. Ultrasonographic findings consistent with cornual gestation include an eccentrically located gestational sac surrounded by asymmetrical myometrial tissue with a distinct and separate uterine cavity.^[6] and an echogenic line abutting the gestational sac, representing either interstitial tube or endometrium, depending on the age and size of the gestation.^[7] Although the above authors reported excellent sensitivity and specificity for diagnosis when the above criteria were used, others have not been able to corroborate their findings. Newer diagnostic technology is currently being studied, such as 3-dimensional ultrasonography, hysteroscopy, and magnetic resonance imaging, but currently, diagnosis remains a quandary.

The typical rupture of these ectopic pregnancies within the myometrium usually occurs later than 9 weeks and as late as 20 weeks (authors' personal experience).

Once the diagnosis has been made, a myriad of treatment regimens for this type of gestation, both medical and surgical, have been reported. Previous interventions

commonly included hysterectomy or cornual resection via laparotomy. However, more conservative laparoscopic approaches have been implemented recently, including cornual resection, cornuotomy, and salpingectomy.^[9] However, rupture of CP could stimulate serious intra-abdominal bleeding resulting in hypovolemic shock; therefore, laparotomy could be preferred in hemodynamically unstable patients as it the case of our patient. Besides surgical treatment Systemic injection of methotrexate is the most extensively studied medical regimen, this drug had been administered either as a single dose or in a multiple-dose fashion with some success.^[10] Methotrexate has also been successfully administered in a localized fashion with both ultrasonographic and laparoscopic guidance. Other medical treatments showing some success include both etoposide and potassium chloride, which were injected into the gestational sac during ultrasonographic visualization.^[11] Although medical management is a useful option for treating cornual pregnancies, it is not without its drawbacks. With methotrexate treatment, neither gestational sac size nor serum hCG levels can be used to predict success for cornual gestations. The overall failure rate for methotrexate treatment is also quite high, at a rate of 35% (7/20) in the literature.^[12] Because of the potential for catastrophic outcomes associated with failure of medical management, surgery remains the mainstay of treatment.

CONCLUSION

Cornual pregnancy is associated with fatal complications for the mother and fetus, necessitating the prompt diagnosis and management in the ED. Salpingectomy could not eliminate the potential of ipsilateral ectopic pregnancy. Therefore, an early well-organized follow-up of each pregnant with a history of salpingectomy is recommended to avoid potentially fatal consequences.

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