

Bilateral Adnexal Torsion in the First Trimester of Pregnancy: Case Report

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Abstract: Adnexal torsion is a rare cause of acute abdominal pain during pregnancy. torsion in ovarian hyperstimulation syndrome (OHSS) is a relatively rare but serious complication in pregnant women. A delay in treatment increases the risk for functional loss of the ovary and early termination of pregnancy. In this report, we present the case of a 27-year-old female with OHSS who experienced ovarian torsion that was successfully treated with laparotomy detorsion.

Mots clefs: annexe, ovaire, torsion, syndrome d'hyperstimulation ovarienne

Keywords: Adnexa, Ovary, Torsion, ovarian hyperstimulation syndrome

1. Introduction

Adnexal torsion is rarely observed during pregnancy, its incidence is approximately 5 in 10000 pregnancies (1), occurring more frequently in the first trimester, it's a disorder with a very high patient morbidity. When the patient is pregnant, this can lead to fetal mortality and potential loss of fertility for the patient. Nonspecific symptoms and signs as well as the limitations of ultrasound (US) make the diagnosis difficult, resulting in the loss of adnexa and fetal compromise. Imaging and laboratory results may be used as support; however, the diagnosis should primarily be made on a strong history and physical exam. we report the case of a pregnant patient of 10 GW + 6 days with bilateral ovarian torsion.

2. Case Report

The patient was a 27-year-old gravid 2 para 1 (G2P1); G1: cesarean section for acute fetal distress G2: current pregnancy estimated at 11 weeks gestational age by last menstrual period. the patient is followed for a secondary infertility of 7 years for which she benefited from an ovarian stimulation. the patient went to the emergency room of the Souissi maternity hospital in Rabat with acute onset of excruciating diffuse hypogastric pain, she also reported three episodes of nausea and vomiting prior to admission, she arrived to the emergency room approximately four hours after the onset of pain describing her pain as nonradiating, sharp, and 10 out of 10 in severity. At the time of admission, the patient was febrile (37.8C), pulse of 99 beats per minute (BPM), respiratory rate of 21 breaths per minute, and blood pressure of 120/85 mmHg. At the time of the initial examination the patient was in pain with an analgesic position, Her abdominal exam revealed diffuse pelvic pain on palpation, no bleeding on speculum examination, with a long closed posterior cervix, and very sensitive right and left adnexal masses.

Laboratory results were normal. A formalized pelvic ultrasound (US) showed a single live intrauterine pregnancy with a craniocaudal length corresponding to 10 SA+6 days (Fig 1) Right ovary is enlarged measuring 9/6 cm with multiple supra centimetric cystic images (Fig 2) Left ovary is enlarged measuring 10/6cm with multiple supra centimetric cystic images of peripheral arrangement with

dense hypertrophied stroma (Fig 3) with a turn of spire in the right para ovary.



Figure 1: Abdominal ultrasound image showing, the uterus with intact intrauterine pregnancy equal to 10 weeks 6 days

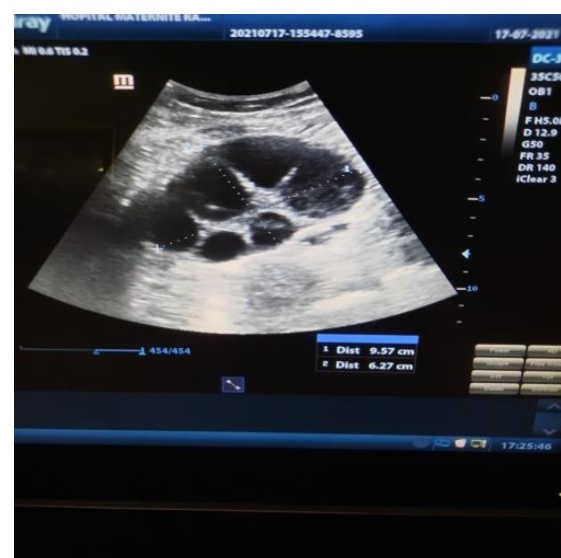


Figure 2: Right ovary



Figure 3: Left ovary

An exploratory laparotomy was indicated in emergency for suspicion of ovarian torsion, under spinal anaesthesia, and after resumption of the old pfannenstiel scar we found large blue right and left cystic ovaries twisted with 2 turns of spire on the right and only 1 on the left; a globular uterus increased in volume, the rest of the pelvis is without particularity (Fig4).

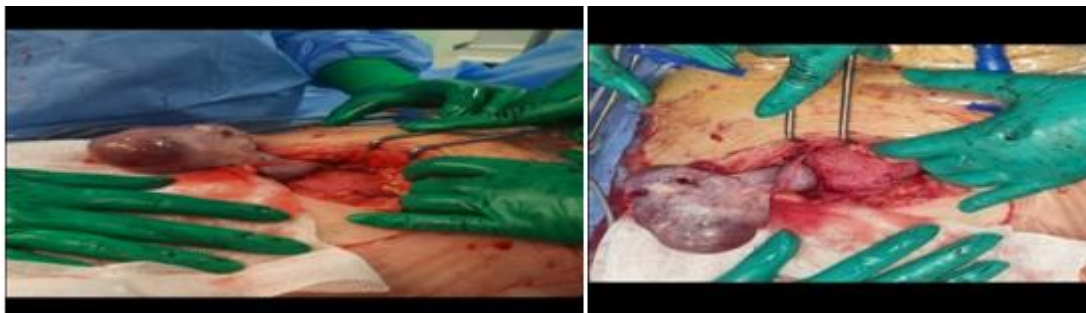


Figure 4: Right Adnexal Torsion

The surgical procedure consisted first of a detorsion of both ovaries with bilateral ovarian drilling

The 2 ovaries were revitalized 5 min after detorsion (Fig5)

To avoid a miscarriage, progesterone was prescribed for 3 weeks

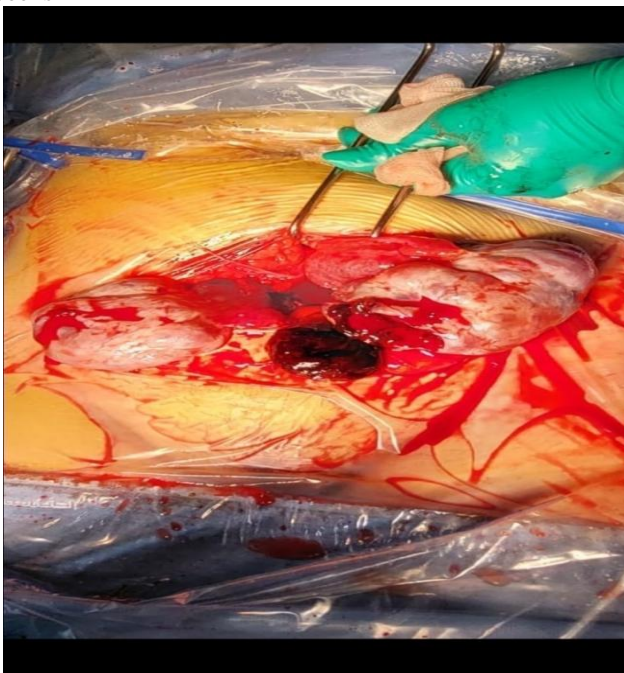


Figure 5: The 2 ovaries after detorsion

The postoperative follow-up was good and the pregnancy evolved normally, the patient was delivered vaginally of a healthy girl (3300 g, 45 cm) born in the 40 GW.

3. Discussion

In this case report, we present a case of bilateral adnexal torsion caused by OHSS and was managed successfully by detorsion of both ovaries without oophorectomy.

Adnexal torsion is a rare cause of acute abdominal pain. It accounts for approximately 3% of gynecological emergencies and 10–20% of ovarian torsions occur during pregnancy. Adnexal torsion is frequently associated with ovarian stimulation treatment for IVF or ovarian masses.

During pregnancy it's a rare condition, more common in the second and early third trimester, and exceptional during the first trimester (2). The symptoms are nonspecific, and can be confused with other acute abdominal conditions such as appendicitis, ureteral or renal colic, cholecystitis and bowel obstruction. The presence on ultrasound of an ovarian mass or hyperstimulated ovaries should raise the suspicion for adnexal torsion (3) as it is the case of our patient.

Clinical outcomes occurring with ovarian torsion vary depending on how rotation is established. With progressive torsion, lymphatic drainage is compromised first, leading to increased ovarian size due to lymphatic edema. This is followed by venous obstruction and hemorrhagic infarction.

The final stage is interruption of arterial blood supply which may lead to gangrene.

The clinical diagnosis of ovarian torsion is difficult. Its difficulty is related to several factors; the clinical presentation and the examination result are similar to several other pathologies. Thus, no clinical sign is specific. Abdominal pain is the ubiquitous symptom in all cases of ovarian torsion; it is the mode of revelation of ovarian torsion, but it can have extremely different characteristics; indeed the pain can occur intermittently before the torsion, which corresponds to phenomena of torsion detorsion of the ovary. The clinical presentation of our patient was essentially dominated by acute abdominal pain.

Management of adnexal torsion in pregnancy remains controversial. Although the laparoscopic approach combined with simple detorsion has been described, laparotomy and salpingo-oophorectomy may sometimes be necessary (4, 5). However, we are aware that our management was debatable, and that preservation of the ovary might have been an option, despite the failure of improvement in colour or oedema after 5 min from detorsion (6)

4. Conclusion

Adnexal torsion is a rare event during pregnancy, which requires differential diagnosis from other diseases presenting with abdominal pain. It necessitates a prompt surgical intervention, because any delay leads to irreversible ovarian necrosis, so that adnexectomy is ultimately required. Despite the technological advances in ultrasonography, the diagnosis of the disease is difficult, especially during pregnancy and occasionally remains a diagnostic dilemma.

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