

ADNEXAL TORSION IN THE FIRST TRIMESTER OF PREGNANCY: ABOUT A CASE AND LITERATURE REVIEW

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ABSTRACT

Adnexal torsion during pregnancy is a rare pathology secondary to total or partial rotation of the adnexa around its vascular axis. It can be favored by the existence of an adnexal mass or more rarely occur on a healthy adnexa. The clinical signs are often not very specific and ultrasound is the most commonly used imaging method for diagnosis. Treatment is surgical, either by laparoscopy or by laparotomy.

KEYWORDS: Adnexal torsion, pregnancy, Emergency.**INTRODUCTION**

Adnexal torsion in pregnancy is a rare condition that affects 5 out of 10000 pregnancies^[1], and can occur in all three trimesters of pregnancy but has its highest incidence in the first trimester. We present a case of right adnexal torsion in a pregnancy of 10 weeks of amenorrhea.

CASE PRESENTATION

The patient was 25 years old, without any notable pathological history, G1P0, who consulted for acute pelvic pain in the right iliac fossa, which had been present for 24 hours and had not been improved by analgesic treatment during a 12-week amenorrhea. The pain was isolated in the right iliac fossa, non-radiating and not relieved by any position. The general examination found a conscious, hemodynamically stable patient. Abdominal examination found a soft abdomen with tenderness in the right iliac fossa. On vaginal examination: the uterus is enlarged (reaching 2 TDD above the pubic symphysis), with right latero-uterine tenderness. Pelvic ultrasound found an evolving monofetal pregnancy with a biometry corresponding to the term, a heterogeneous isoechoic enlarged right ovary containing a few scattered follicles with infiltrated and edematous stroma not taking the color Doppler signal measuring 51 × 56 mm seat of a cyst measuring 8 × 8 cm. The diagnosis of right adnexal torsion was evoked. A laparotomy was performed, showing an enlarged, hemorrhagic, blackish, twice-twisted right ovary with a cyst measuring 8 cm long. Detorsion was performed, but no improvement in color or decrease in edema was noted after 10 min (**Figure 1**). A right salpingo-oophorectomy

was then performed. Anatomopathological study of the surgical specimen was in favor of a hemorrhagic necrosis of the ovary and fallopian tube.

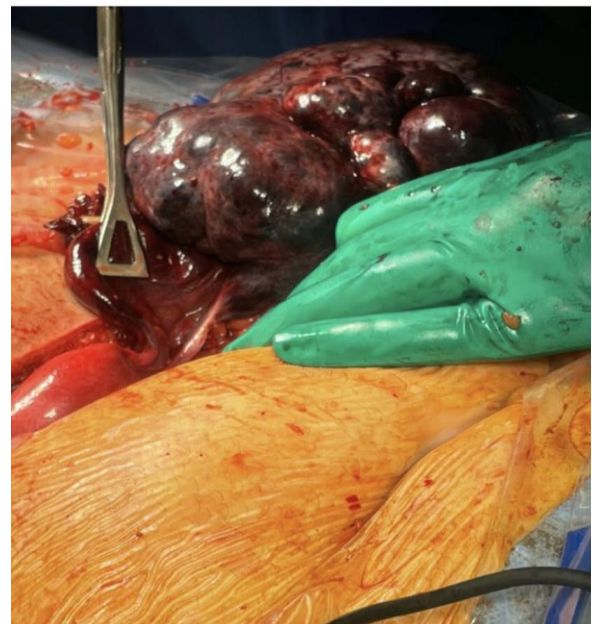


Figure 1: Intraoperative exploration showing a necrotic ovary and fallopian tube.

DISCUSSION

Ovarian torsion is defined as a partial or complete rotation of the ovarian pedicle around its vascular axis, usually affecting both the ovary and the fallopian tube, that's why the term "adnexal torsion" is preferred to "ovarian torsion". The risk of adnexal torsion is

increased fivefold during pregnancy. The incidence is 5 per 10000 pregnancies^[1], it can occur during all three trimesters of pregnancy but has its highest incidence in the first trimester.

The torsion most often occurs on the right side^[2] and is usually favoured by the existence of an adnexal mass: malignant or benign tumour, cyst of the corpus luteum, or on the occasion of an ovarian hyperstimulation syndrome at the beginning of pregnancy^[3] or, more rarely, may occur on a healthy adnexa.

The symptoms are non-specific and are characterized by sudden and acute lateral pelvic pain (98% of cases), associated with nausea and vomiting (78% of cases), secondary to peritoneal irritation, and a known adnexal mass (82% of cases).^[2]

Ultrasound is the examination of choice. It allows differential diagnoses to be eliminated, and looks for factors that may promote torsion and indirect signs of ischemia. Pelvic ultrasound is poor in positive signs of torsion; the most common finding on ultrasound is an enlarged ovary compared with the contralateral side, reflecting reactive oedema secondary to interruption of venous flow.^[4,5] The presence of several small follicles placed in the periphery of the ovary is an additional non-specific sign but has been found several times in the case of torsion on a healthy ovary.^[5,6] An ascitic fluid slide is often associated.^[7] Torsion of the ovarian pedicle is pathognomonic of adnexal torsion, however, it is seen in <30% of cases.^[8]

The usefulness of Doppler of the ovarian vessels is highly controversial. Although the absence of a Doppler signal confirms the absence of venous or arterial flow and therefore torsion, the reverse is not true.^[9] MRI (magnetic resonance imaging) is an interesting complementary exploration technique in pregnant women, which has the same interest as ultrasound with greater precision.^[10] MRI findings consistent with adnexal torsion include a thick edematous pedicle and ovary, lack of enhancement, and signal intensities consistent with hemorrhage.^[6]

Conservative or radical treatment is decided according to the appearance of the adnexa 10 minutes after detorsion. Mage^[11] described three stages of severity after detorsion: stage 3 includes lesions that are necrotic in appearance, black, friable, bulky, with false membranes, with no recovery of the adnexa 10 minutes after detorsion. This stage deserves adnexectomy. The other two stages allow conservative treatment: stage 2 comprises lesions of severe ischaemia with a dark red or purple appearance. Total or partial recovery of the normal appearance of the adnexa 10 minutes after detorsion is observed. Stage 1 does not present an ischemic appearance and recovery is total after detorsion.

The recommendations of the National College of French Gynecologists and Obstetricians (CNGOF) recommend the laparoscopic technique up to 16-17 weeks' gestation with however safety instructions to be respected, specifying that laparotomy is the most evaluated (and therefore recommended) approach after 17 weeks' gestation.^[12] However, several retrospective series have shown the safety and efficacy of laparoscopy in the 3rd trimester.^[13, 14, 15, 16]

Oelsner et al, compared the results of 197 laparotomies and 192 laparoscopies in 17 centers.^[17] It was concluded that laparoscopy does not increase the risk of spontaneous abortion, premature delivery, intra-uterine growth retardation or fetal malformation compared to laparotomy. It also has a significantly lower risk of postoperative complications.

CONCLUSION

Treatment of adnexal torsion during pregnancy can be carried out laparoscopically, taking into account the safety instructions with respect to the pregnant uterus. The treatment should be conservative if the recovery of the adnexa after detorsion allows it. The evolution of the pregnancies is good^[18], comparable to that observed after laparotomy.

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