Healthy adnexal torsion in pregnancy: A case report

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A R T I C L E   I N F O

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A B S T R A C T

Adnexal torsion during pregnancy is a rare surgical emergency. We present the case of a 28 year old patient, who consulted for acute pelvic pain during an evolving pregnancy of 14 weeks, in front of the clinic and the para-clinical exploration we suspected an adnexal torsion on a cyst of 7 cm for which a laparotomy was indicated in urgency to avoid the necrosis of the adnexa whose exploration came back in favor of a torsion on an ovary with a cyst. We performed a detorsion of the adnexa with a negative ovarian puncture, without ovariopexy. The postoperative follow-up was without particularity. The diagnosis of adnexal torsion remains difficult, especially in the presence of a healthy adnexa. The diagnosis of adnexal torsion remains difficult, especially in the presence of a healthy adnexa. The detorsion of the adnexa, ovariopexy, should not be systematic.

1. Introduction

Adnexal torsion during pregnancy is a rare surgical emergency. Its incidence varies from 3 to 5 per 10,000 pregnancies. It is caused by a torsion on the axis defined by the lumbo-ovarian ligament and the tuboovarian ligament [1,2]. It can involve the tube and the ovary, the ovary alone and less frequently the tube alone. We present a case of adnexal torsion on a healthy ovary that occurred in the first trimester of pregnancy. The work has been reported with respect to the SCARE 2020 criteria [3].

2. Patient and observation

Mrs. S.B, 28 years old, IIG IIP. She had no notable medical or surgical pathological history and had a regular cycle without any notion of taking oral contraception. She came to the emergency room with right lateropelvic pain of torsion type, acute onset, evolving since 6 h, on a 14 weeks amenorrhea. The examination on admission found a conscious patient with a GCS of 15 and a VAS of 10. Hemodynamically and respiratorily stable: BP 11/7mmhg, HR: 88 bpm, FR 19 C/min, apyretic T: 37.2. Abdominal examination found a soft abdomen with normal breathing and right latero-uterine tenderness. On gynecological examination we suspected an adnexal torsion on a cyst of 7 cm for which a laparotomy was indicated in urgency to avoid the necrosis of the adnexa whose exploration came back in favor of a torsion on an ovary with a cyst. We performed a detorsion of the adnexa with a negative ovarian puncture, without ovariopexy. The postoperative follow-up was without particularity. The diagnosis of adnexal torsion remains difficult, especially in the presence of a healthy adnexa. The diagnosis of adnexal torsion remains difficult, especially in the presence of a healthy adnexa. The detorsion of the adnexa, ovariopexy, should not be systematic.

3. Discussion

8 and 28 % of torsions occur during pregnancy [4,5], mostly in the first trimester but can be diagnosed at any age of pregnancy [5]. Abdominal pain is the ubiquitous symptom and the mode of revelation in all cases of ovarian torsion [6]. The onset of this pain is often abrupt and localized [8]. However, it can have extremely different characteristics [6,7]. Indeed, the pain may occur intermittently before torsion, which corresponds to phenomena of torsion and detorsion of the ovary [5,7,8]. It requires the elimination of miscarriage, retroplacental hematoma, uterine rupture. In addition, it may cause uterine contractions, thus leading to a risk of miscarriage (early or late) or premature delivery.
depending on the age of pregnancy. Clinical examination may rarely
find hyperthermia, which is usually associated with the ischemic
process. The presence of a latero-uterine mass is noted in 41 to 70 % of cases
on clinical examination. Signs of peritoneal irritation are found when
the adnexa becomes necrotic. Abdominal defense, contrary to a wide-
spread idea, is rarely present at the beginning of the evolution. The
presence of unilateral latero-uterine pain on vaginal touch points to
adnexal torsion. There are no additional biological tests specific to
adnexal torsion. A hyperleukocytosis may be present on the blood count,
which may be due to leukocyte depletion. There is no correlation be-
tween hyperleukocytosis and tissue necrosis. 9–26 % of torsions occur in
apparently healthy adnexa and therefore show no initial abnormality on ultrasound [10]. Signs of adnexal ischemia appear secondarily with an
increase in ovarian size, an increase in the number of follicles and a
thickening of the interfollicular septa. The Doppler effect in ultrasound
has been studied and its usefulness is discordant according to different
studies. According to Pena et al. [11] 60 % of torsions are not seen by
Doppler, but its positive predictive value is 100 %. Doppler only di-
agnoses arterial flow interruptions and does not allow the diagnosis of
venous interruptions, which are often prior to arterial interruptions. A
normal Doppler examination does not therefore allow the exclusion of
adnexal torsion. The diagnosis of certainty of adnexal torsion can only
be made intraoperatively, either by laparoscopy or laparotomy. The
surgical intervention is therefore initially diagnostic for proven adnexal
torsion, and then therapeutic. In the absence of any contraindication,
laparoscopy should be the preferred approach, including in the case of
pregnancy [9]. Ovariopexy is proposed by certain authors in order to
prevent recurrence of adnexal torsion. The recognised indications are a
malformation or lengthening of the utero-ovarian ligament, torsion on a
single adnexa or contralateral pexy in the case of adnexectomy of the
twisted adnexa. Similarly, as recurrence approaches 20 % in pregnant
patients, pexy seems to be indicated in these patients [12].

4. Conclusion

The diagnosis of adnexal torsion remains difficult, particularly dur-
ing pregnancy and even more so in the presence of a healthy adnexa.
Indeed, the clinical picture is not very specific, and paraclinical exa-
ninations are not very reliable for making a positive diagnosis, but they
still have their place in order to eliminate the various differential di-
agnoses and to look for an adnexal pathology. The surgical procedure
must be conservative and consist of detorsion of the adnexa, ovariopexy
should not be systematic. The prognosis for pregnancy is generally
favourable, some cases of growth retardation and premature delivery
have been described.

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Ethical approval

I declare on my honor that the ethical approval has been exempted
by my establishment.

Consent

Written informed consent for publication of their clinical details
and/or clinical images was obtained from the patient.

Author contribution

El Qasseh Rajaa: Corresponding author writing the paper.
Jaal mohammed: study concept.
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Fechtali Karima: study concept.
Bouhaya Said: correction of the thesis and operating surgeon.

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Declaration of competing interest

The authors declare no conflict of interest.

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