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Healthy adnexal torsion in pregnancy: A case report

M. Jalal, R. El Qasseh *, N. Youssouf, Z. Sami, S. Benrehal, A. Lamrissi, K. Fechtali, S. Bouhya

Department of Gynecology - Obstetrics, Ibn Rochd University Hospital of Casablanca, Faculty of Medicine and Pharmacy of Casablanca, Hassan 2 University, Casablanca, Morocco

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ABSTRACT

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 paraclinical 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; speculum: the cervix is macroscopically normal, no bleeding from the endocervix. On vaginal touch: the uterus is enlarged (at 3TDD of MS), with presence of right latero-uterine tenderness. Ultrasound (suprapubic and endovaginal) is in favor of an intrauterine embryo sac with positive cardiac activity, the cranio-caudal length corresponding to 13 weeks. With presence in the right latero-uterine of a slightly heterogeneous echogenic image with anechoic areas of 7.92 cm × 3.99 cm without Doppler scan evoking a large twisted ovary. The patient underwent a mini-Pfannenstiel laparotomy, with a thin layer of effusion, an enlarged uterus with an unremarkable left adnexa. The right adnexa was severely ischaemic, twisted by three turns of the coil, without any individualisable cystic mass and a normal-looking uterovarian ligament. The decision was therefore made to perform a detorsion of the adnexa with an ovarian puncture that came back negative, without ovariopexy. The postoperative follow-up was unremarkable with disappearance of the pain and a pregnancy that was still evolving and tocolysed. An ultrasound check after 3 weeks found a still evolving pregnancy.

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

* Corresponding author at: Mohammed el bahi, Palmier, Maarif, Imm 161, 20340 Casablanca, Morocco.
E-mail address: rajaaelqasseh@gmail.com (R. El Qasseh).

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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 widespread 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 between 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 diagnoses 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 during pregnancy and even more so in the presence of a healthy adnexa. Indeed, the clinical picture is not very specific, and paraclinical examinations are not very reliable for making a positive diagnosis, but they still have their place in order to eliminate the various differential diagnoses 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.
Jalal mohammed: study concept.
Youssouf N: study concept.
Sami Z: study concept.
Lamrissi amine: study concept.
Fechtali Karima: study concept.
Bouhaya Said: correction of the thesis and operating surgeon.

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Guarantor

DR EL QASSEH RAJAA.

Declaration of competing interest

The authors declare no conflict of interest.

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