

## Twisted Para-Tubal Cyst: An Unusual Cause of Pelvic Pain During Pregnancy

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### ABSTRACT

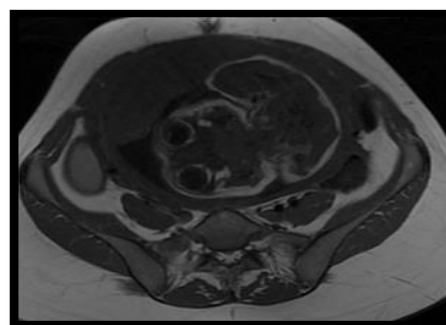
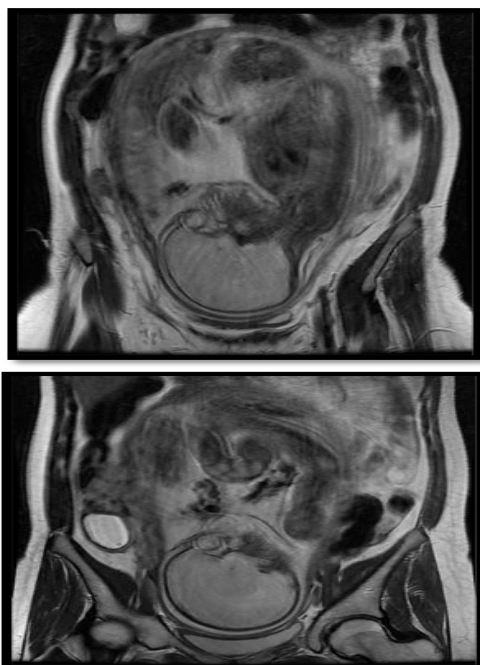
The twist of a para-tubal cyst is an uncommon situation that must be evoked for any pelvic pain for a young woman. Pelvic ultrasound coupled with the Doppler must be realized at first. Ovarian cyst and tubal cyst are the main differential diagnoses. We report the case of a young woman of 36 weeks of amenorrhea, who consulted for a progressive right iliac pit pains. The diagnosis of twisted para tubal cyst was confirmed by magnetic resonance imaging (MRI).

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### Introduction

#### Case report

A young woman of 29 years, primipare of 36 weeks of amenorrhea, without pathological history, who consulted for pains of right iliac pit evolving for 24 hours associated with bilious vomiting. She presented a fever at 38° without metrorrhagia. The biological examination found a leucocytosis at 12000 e / mm, a CRP at 56. The cytobacteriological examination of the urine was with no anomalies. An abdomino-pelvic MRI was performed (fig. 1 a, b, c).



**Figure 1. abdominal-pelvic MRI in T2-weighted sequence in coronal sections (a+b) and T1-weighted sequence axial section (c): Right lateral uterine cystic formation (yellow arrow), hyposignal with T1 weighting and hypersignal with T2 weighting, thin-walled, 5 cm long, which continues with the right ligament and is surmounted by a serpiginous formation corresponding to the fallopian tube (white arrow).**

#### Image analysis

An abdomino-pelvic MRI was performed in T1 and T2-weighted sequences in axial and coronal sections and confirmed the presence of right lateral uterine cystic formation, hyposignal with T1 weighting, hypersignal with T2 weighting, thin-walled, 5 cm long, which continues with the right ligament and is surmounted by a serpiginous formation corresponding to the fallopian tube. The appendix and the right ovary were with no anomalies.

All of these elements were in favor of secondary twisting secondary to a right para-tubal cyst. An expulsion of the foetus by a caesarian delivery was carried out without complications. Exploration of the right iliac fossa revealed a double twist of the right fallopian tube associated with a

para-tubal cyst with no damage to the right ovary. In spite of the immediate detorsion and the warming to the saline serum, the tube has not revascularized. A cystectomy with retrograde salpingectomy was performed.

#### Discussion

The para-tubal cyst represents 10% of the total adnexal mass. It originates from embryonic wolffian mesonephric or mesonephric müllerian residues or mesothelial inclusions [1], or develops in the broad ligament. It is more common in women in genital activity, rarely in adolescence [2]. Generally, the para-tubal cyst is accidentally discovered or during spasmodic pelvic pain. It is often unilateral, containing small partitions or vegetations. Rarely, it can be complicated by twisting, bleeding, rupture or degeneration.

Pelvic ultrasound coupled with Doppler is the first-line examination. It shows an inter-utero-ovarian or para-tubaire cystic formation, sometimes showing small parvital veins that are not vascularized with color Doppler. Generally, the cyst is located at a distance from the ovary and in the mesosalpynx [3]. The search for the ovaries must be systematic. The distinction between an ovarian cyst and tubal cyst remains difficult.

Pelvic MRI is superior to the CT scan for pelvic examination. It is rarely indicated in emergency situations. It allows, when performed, confirming the cystic nature of the para tubal mass, specifying the topography of the ovaries and the fallopian tubes and to eliminate the other etiologies of the cystic masses, particularly the ovarian and para ovarian cysts and the cystic ovarian tumors.

The treatment of choice is coelio-surgery. Early management involves untwisting the tube and cystectomy [4]. When the diagnosis is delayed, curative salpingectomy is performed. A fixation of the controlateral fallopian tube is systematic [5].

#### Conclusion

The twist of a para-tubal cyst is an uncommon situation that must be evoked for any pelvic pain in young women. The progressive painful character is very evocative. Pelvic ultrasound coupled with the Doppler, is perfectly adapted to emergency situations. It makes the positive diagnosis in all cases. Conservative threatment by coelio-surgery is indicated at first.

#### The authors report no conflicts of interest

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