Case (482) When the twist is the key. case report.

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## CASE PRESENTATION

49 years old woman, presented to the emergency department with sudden onset of right iliac fossa pain, without fever or other symptoms.

The assessment by the gynecology department, rules out ginecological pain pathology, for wich computed tomography is requested to our radiology service to know the cause of the disease.

The abdominpelvic CT report moderate amount of higt density free liquid compatible with hemoperitoneum. In the left adnexal región an image of soft tissue density of  $9 \times 7$  cm of diameters (craniocaudal and transverse) with cystic formations inside.

Associated incurvacion of the vascular pedicel "swirl or twist sign", compatible with ovarian torsion with underlying cystic lesion. With consent, the patient is operated on in an emergency and the diagnosis is confirmed.

## DISCUSSION

Ovarian torsion is the fifth most common gynecologic surgical emergency and occur most commonly in reproductive age. This entity is defined as partial or complete rotation of the ovarian vascular pedicle, it can involve the ovary, the fallopian tube, or both. It is usually associated with a cyst or tumor, which is typically benign; the most common is mature cystic teratoma.

The varied imaging features and nonspecific symptoms of ovarian torsion can lead to a delay in identification, with misdiagnosis being common. Given the potential loss of ovarian function with prolonged time of torsion, it is important to make an early diagnosis and proceed with management in a timely fashion.

Ultrasound is the gold standars imaging choice because of its ability to directly and rapidly evaluate ovarian anatomy as well as blood flow in a noninvasive manner.

The typical findings are: Unilateral enlarged ovary, string of pearls sign, coexistent mass within the twisted ovary, free pelvic fluid and twisted vascular pedicle.

Common tomography findings are somewhat nonspecific and include an adnexal mass that may be in the midline, rotated toward the contralateral side of the pelvis; deviation of the uterus to the side of the affected ovary; and ascites.

Other findings include lack of enhancement, obliteration of fat planes, hematoma, and gas within the torsed mass.

## CONCLUSION

Ovarian torsion is a pathology that, due to its nonspecific symptoms, can lead to diagnostic errors, so the radiologist must know the signs that can help achieve a diagnosis that leads to early treatment and thus avoid fatal results.

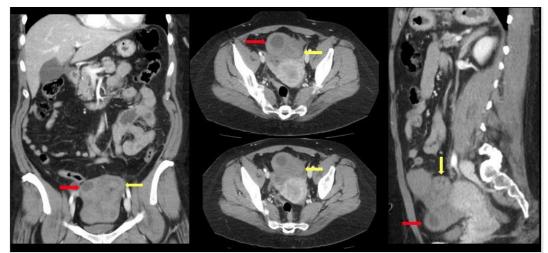


Figure 1: Abdominpelvic contrast CT revealed, high density free liquid compatible with hemoperitoneum. In the adnexal región an image of soft tissue density with cystic formations inside (red arrow), incurvacion of the vascular pedicel "swirl or twist sign" (yellow arrow), compatible with ovarian torsion with underlying cystic lesion.

## **BIBLIOGRAPHY**

- Kives S, Gascon S, Dubuc É, Van Eyk N. No. 341. Diagnosis and Management of Adnexal Torsion in Children, Adolescents, and Adult. JObstet Gynaecol Can. 2017 Feb;39(2):8290.
- Mohan, S., Thomas, M. Adnexal torsion: clinical, radiological and pathological characteristics in a tertiary care centre in Southern India. Reprod Contracept Obstet Gynecol. 2014 Sep;3(3):703-708.
- Wilkinson, C. et al. Adnexal torsion. A multimodality imaging review. Clin Radiol. 2012 May;67(5):476-83.