

Ovarian Torsion in Normal Ovaries in Reproductive Aged Women.

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Introduction

Ovarian torsion is a gynecological emergency caused by the ovary twisting around its supporting ligaments, leading to compromised blood supply. It commonly occurs in ovaries enlarged by cysts or masses but can also affect normal ovaries, particularly in premenarchal girls with elongated infundibulopelvic ligaments. However, its occurrence in reproductive-aged women with normal ovaries is rarely reported.

Aim

This report presents two cases of ovarian torsion in normal ovaries, highlighting diagnostic and management challenges.

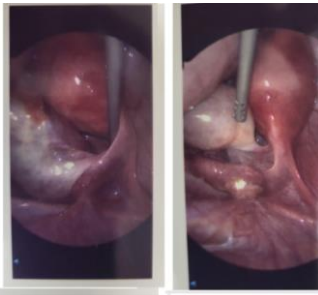


Figure 1: A. Bulky Right Ovary with Torsion at the Utero Ovarian Ligament. B. Right Ovarian Detorsion.

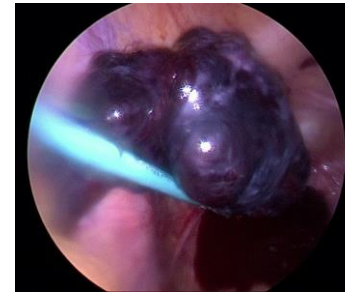


Figure 2: Oedematous, Congested, Necrotic Looking Left Ovary with Blood in the Pelvis.

Diagnosis is challenging due to variable presentations. Ultrasound is the primary tool but has a sensitivity of 46–75%.² The Doppler flow may be normal, decreased, or absent. Laparoscopy is the preferred treatment. Historically, adnexectomy was performed for necrotic ovaries due to concerns about embolism. However, recent evidence supports conservative management (detorsion ± cystectomy) to preserve function without increased risks. Salpingo-oophorectomy remains necessary if malignancy is suspected or for postmenopausal patients.

Case report

A 19-year-old female presented with sudden-onset right iliac fossa pain. Ultrasound showed a bulky right ovary (58×34×50 mm) with normal Doppler flow and free pelvic fluid, suggesting intermittent torsion. Laparoscopy confirmed a 1.5x torsion at the utero-ovarian pedicle. Detorsion was performed, and she recovered well with a normal follow-up ultrasound.

A 40-year-old post-hysterectomy patient presented with acute left iliac fossa pain. Imaging suggested a complex adnexal lesion with poor Doppler flow. Due to worsening pain, laparoscopy was performed, revealing a 2x torsion of the left ovary on the infundibulopelvic ligament. Detorsion showed no viability, necessitating oophorectomy. Histopathology confirmed torsion. At six-week follow-up, she was stable but developed a right ovarian cyst requiring laparoscopic cystectomy.

Discussion

While most cases of ovarian torsion occur in reproductive-aged women with ovarian masses ≥ 5 cm, torsion can also occur in normal ovaries, though rarely reported.¹ Torsion is less common in premenarchal and postmenopausal women (17.2% of cases). Fixed ovaries, such as those affected by endometriomas, tubo-ovarian abscesses, or malignancy, are less prone to torsion.

References:

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2. Mashiach, R., Melamed, N., Gilad, N., Ben-Shitrit, G., & Meizner, I. (2011). Sonographic diagnosis of ovarian torsion: accuracy and predictive factors. *Journal of Ultrasound in Medicine*, 30(9), 1205-1210.