DOI: 10.1002/emp2.12889

IMAGES IN EMERGENCY MEDICINE

Obstetrics and Gynecology



Adolescent female with right lower abdominal pain

Abdullah Khan MD¹ | Amer Alsaied MD² | Muhammad Islam MD¹ Khalid M. AlAnsari MD¹

Correspondence

Abdullah Khan, MD, Emergency Medicine, Sidra Medical and Research Centre, Al Rayyan Road, PO Box 26999, Doha, Qatar. Email: abdullahkhan120@gmail.com

Funding information

Qatar National Library

1 | INTRODUCTION

A 12-year-old girl presented with severe right lower abdominal pain for 12 hours associated with nausea and multiple episodes of vomiting, which was non-bloody and non-bilious in nature. No history of dysuria, urgency, or vaginal discharge existed. Past medical history was unremarkable. The physical examination suggested right lower quadrant tenderness to palpation. The laboratory workup was normal complete blood cell count, blood electrolytes, and urinalysis. Ultrasound of the abdomen and pelvis showed no signs of acute appendicitis and normalsized ovaries with normal blood flow. A right adnexal cystic lesion measuring $5.4 \times 4.0 \times 4.2$ cm located in the right hemipelvis between the uterus and right ovary was identified (Figure 1A). Considering the intensity and persistence of the pain, the patient was taken to the operating room. The laparoscopy revealed fallopian tube torsion secondary to para ovarian cyst (Figure 1B).

DIAGNOSIS

Torsion of fallopian tube secondary to para-ovarian cyst. Para-ovarian cysts or para-tubal cysts account for up to 20% of all adnexal masses and are found in females of all ages. The incidence of para-ovarian cysts in the pediatric and adolescent population is approximately

7%.1 Like ovaries, the para-ovarian cyst can also undergo torsion with similar symptoms of abdominal pain, nausea, and vomiting. The chances of para-ovarian cyst torsion are not associated with the size or appearance of the cyst on ultrasound.² The para-ovarian cyst can torse on itself and cause fallopian tube torsion. The fallopian tube torsions are a rare cause of acute abdomen and are difficult to diagnose because symptoms are similar to other causes of adnexal torsion. Although ultrasound with color doppler is the initial diagnostic modality in adnexal pain, para-ovarian cysts are not easily identified. If clinical suspicion of adnexal torsion is high and ultrasound is normal, magnetic resonance imaging or diagnostic laparoscopy can be considered.³ In our patient the ultrasound identified a cyst with normal color doppler of both ovaries but, owing to persistent pain, laparoscopy was performed and torsion of fallopian tube secondary to para-ovarian cyst was identified (Figure 1B). In summary, para-ovarian cyst can cause torsion of adnexal structures.

ACKNOWLEDGMENT

The publication of this article was funded by the Qatar National Library.

CONFLICT OF INTEREST

The authors report no conflict of interest.

This is an open access article under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made. © 2023 The Authors. JACEP Open published by Wiley Periodicals LLC on behalf of American College of Emergency Physicians.

¹Department of Emergency Medicine, Sidra Medical and Research Centre, Doha, Qatar

²Pediatric Surgery, Sidra Medical and Research Centre, Doha, Qatar

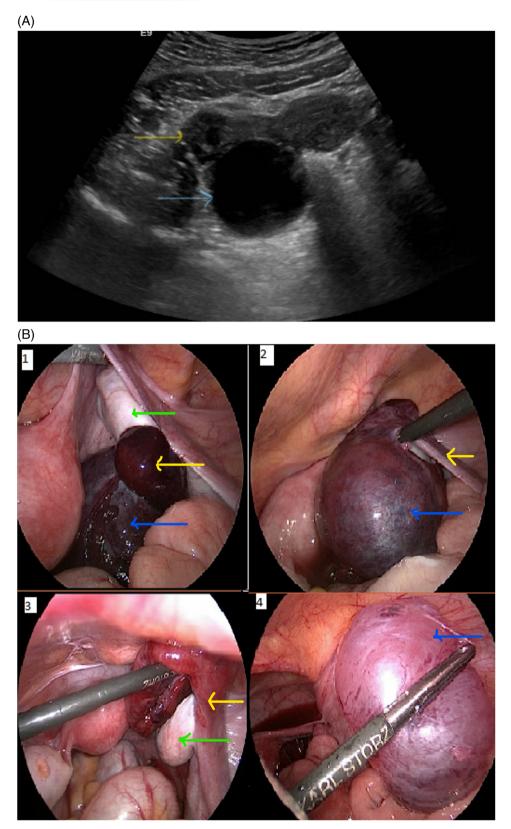


FIGURE 1 (A) Ultrasound image of right ovary (yellow arrow) and para-ovarian cyst (blue arrow) and (B) Laparoscopic view; yellow arrow = fallopian tube, blue arrow = para-ovarian cyst, green arrow = ovary.1: fallopian tube torsion, para-ovarian cyst, and ovary (without torsion); 2: de-torsed fallopian tube gaining vascularity; 3: fallopian tube post excision of para-ovarian cyst; 4: excised para-ovarian cyst.



REFERENCES

- Muolokwu E, Sanchez J, Bercaw JL, et al. The incidence and surgical management of paratubal cysts in a pediatric and adolescent population. J Pediatr Surg. 2011;46(11):2161-2163.
- Tzur T, Smorgick N, Sharon N, Pekar-Zlotin M, Maymon R, Melcer Y. Adnexal torsion with paraovarian cysts in pediatric and adolescent populations: a retrospective study. J Pediatr Surg. 2021;56(2): 324-327.

3. Qian L, Wang X, Li D, Li S, Ding J. Isolated fallopian tube torsion with paraovarian cysts: a case report and literature review. *BMC Womens Health*. 2021;21(1):345.

How to cite this article: Khan A, Alsaied A, Islam M, AlAnsari KM. Adolescent female with right lower abdominal pain. *JACEP Open*. 2023;4:e12889. https://doi.org/10.1002/emp2.12889