SAS Journal of Surgery

Abbreviated Key Title: SAS J Surg ISSN 2454-5104 Journal homepage: <u>https://www.saspublishers.com</u> **∂** OPEN ACCESS

Case Report

Pediatric Surgery

Additional Torsion in Girl: About 1 Case

Doumbia A1*, Daou M B1, Coulibaly Y1, Amadou I1, Coulibaly O1, Kamate B1, Djire M K1

¹Pediatric Surgery Department of CHU Gabriel Touré Bamako-MALI

DOI: 10.36347/sasjs.2024.v10i07.014

| Received: 30.05.2024 | Accepted: 09.07.2024 | Published: 15.07.2024

*Corresponding author: Dr Doumbia Aliou

Pediatric Surgery Department of CHU Gabriel Touré Bamako-MALI

Abstract

Introduction: Adnexal torsion is of particular concern because it occurs most often in girls, adolescents and women of childbearing age (average age: 26 years), that is, those at greatest risk of see their ovarian function and fertility affected. *Observation*: 8-year-old girl, with no known history, admitted for abdominal pain of hypogastric location which has been evolving for 48 hours, in whom clinical examination revealed a hypogastric mass of firm consistency. The abdominal-pelvic CT performed revealed a heterogeneous subbladder cystic mass whose appearance suggests a reworked right ovarian cyst. Alpha fetoprotein and Beta HCG are normal. She underwent surgery. Exploration revealed torsion of the right appendix with necrosis of the right ovarian cyst. We performed a right adnexectomy removing the necrotic right ovarian cyst. The postoperative course was simple. After 06 months, the evolution is favorable. *Conclusion*: Adnexal torsion remains a very difficult condition to diagnose. As its clinical picture is often nonspecific and includes very few distinctive physical manifestations, diagnosis and surgical intervention are generally late. **Keywords**: Twist, Annex, Girl, Bamako.

Copyright © 2024 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC 4.0) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.

INTRODUCTION

Adnexal torsion is of particular concern because it occurs most often in girls, adolescents and women of childbearing age (average age: 26 years), that is, those at greatest risk of see their ovarian function and fertility affected [1]. Given the risk of loss of ovarian function associated with prolonged torsion, early diagnosis and prompt management are essential. We report 01 case of adnexal torsion in an 8-year-old girl.

OBSERVATION

8-year-old girl, with no known history, admitted for abdominal pain of hypogastric location which has been evolving for 48 hours, of severe intensity with a notion of vomiting or fever; in whom the clinical examination revealed a hypogastric mass, of firm consistency.

The abdominopelvic CT performed revealed a heterogeneous subbladder cystic mass whose appearance suggests a reworked right ovarian cyst (Fig1).

The biological assessment: CBC 12g/dl, platelet 200,000/mm3, alpha fetoprotein and Beta HCG are normal.

She underwent surgery. Exploration revealed torsion of the right appendix with necrosis of the right ovarian cyst (Fig2). We performed a right adnexectomy removing the necrotic right ovarian cyst (Fig3).

The postoperative course was simple. After 06 months, the evolution is favorable.



Fig. 1: Abdominopelvic CT: heterogeneous cystic mass of the right ovary remodeled



Fig. 2: Torsion of the right appendix with necrosis of the right ovarian cyst



Fig. 3: Necrotic right ovarian cyst

DISCUSSION

Adnexal torsion is a partial or complete rotation of the uterine appendix at the level of the vascular pedicle. It can affect the ovary, the fallopian tube, or both; however, torsion involving only the tube is rare in all age groups. This condition first disrupts venous circulation, then arterial circulation, causing congestion, edema and ischemia of the appendix, and finally, necrosis of the appendix. The minimum ischemia duration causing irreversible damage is unknown [1].

Adnexal torsion manifests itself a little more often on the right side (66%) than on the left side [2], as in the case of our patient. An adnexal mass is found in most affected adults; in fact, less than 8 to 18% of cases show no pathological manifestation. The majority of pathological abnormalities are tubal or paraovarian cysts, or benign ovarian tumors [3, 4].

Adnexal torsion is difficult to diagnose; this is why a high level of suspicion must be maintained. This condition, typically accompanied by acute unilateral lower abdominal pain [5], is thought to be involved in 3% of gynecological surgical emergencies in adult women and in nearly 2.7% of all cases of acute abdominal pain in women girls [6].

The pain is most often described as throbbing (70%) or sharp (60%) [7]. It can be intermittent, possibly in the presence of a partial torsion that unravels spontaneously, and it often happens that the patient feels frequent intermittent abdominal pain during the few months preceding the torsion. Nausea and vomiting are common, reported by 60 to 70% of patients [4]. On physical examination, 60 to 90% of women and 20% to 36% of girls present with a palpable mass [8]. As the initial clinical picture of adnexal torsion may resemble that of other disorders, its differential diagnosis should also include: pelvic tumor and cyst, without torsion; pelvic inflammatory syndrome; ectopic pregnancy; appendicitis, diverticulitis; and urolithiasis.

The management of adnexal torsion has changed significantly over the past 10 years. Most authors recommend performing detorsion, with or without cystectomy, despite the necrotic appearance of the ovary [9], as in the case of our patient. They may do this because they have received traditional teaching recommending removal of the appendix because of the theoretical risk of thromboembolism associated with untwisting the ovarian pedicle.

The surgical approach to torsion has also changed: the majority of authors now recommend

replacement of the twisted ovary by laparoscopy. However, this surgical approach can be excluded in the presence of a large mass on the ovary (> 10 cm) or in cases of suspected malignancy. Fortunately, malignant lesions are rare (< 3%), both in girls and women with torsion [10].

CONCLUSION

Adnexal torsion remains a very difficult condition to diagnose. As its clinical picture is often nonspecific and includes very few distinctive physical manifestations, diagnosis and surgical intervention are generally late.

REFERENCES

- 1. Hibbard, L. T. (1985). Adnexal torsion. *Am J Obstet Gynecol*, *152*, 456 61.
- Pansky, M., Smorgick, N., Herman, A., Schneider, D., & Halperin, R. (2007). Torsion of normal adnexa in postmenarchal women and risk of recurrence. *Obstetrics & Gynecology*, 109(2 Part 1), 355-359.
- Anders, J. F., & Powell, E. C. (2005). Urgency of evaluation and outcome of acute ovarian torsion in pediatric patients. *Archives of pediatrics & adolescent medicine*, 159(6), 532-535.
- 4. White, M., & Stella, J. (2005). Ovarian torsion: 10year perspective. *Emergency Medicine Australasia*, *17*(3), 231-237.
- Aziz, D., Davis, V., Allen, L., & Langer, J. C. (2004). Ovarian torsion in children: is oophorectomy necessary?. *Journal of pediatric surgery*, 39(5), 750-753.
- Davis, A. J., & Feins, N. R. (1990). Subsequent asynchronous torsion of normal adnexa in children. *Journal of pediatric surgery*, 25(6), 687-689.
- 7. Houry, D., & Abbott, J. T. (2001). Ovarian torsion: a fifteen-year review. *Annals of emergency medicine*, 38(2), 156-159.
- 8. Kokoska, E. R., Keller, M. S., & Weber, T. R. (2000). Acute ovarian torsion in children. *The American journal of surgery*, 180(6), 462-465.
- Aziz, D., Davis, V., Allen, L., & Langer, J. C. (2004). Ovarian torsion in children: is oophorectomy necessary?. *Journal of pediatric surgery*, 39(5), 750-753.
- Descargues, G., Tinlot-Mauger, F., Gravier, A., Lemoine, J. P., & Marpeau, L. (2001). Adnexal torsion: a report on forty-five cases. *European Journal of Obstetrics & Gynecology and Reproductive Biology*, 98(1), 91-96.

© 2024 SAS Journal of Surgery | Published by SAS Publishers, India