
CASE REPORT

Torsion of the Hydatids of Morgagni: A Case Report

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ABSTRACT

Hydatids of Morgagni are pedunculated cysts situated close to the fimbriated end of the fallopian tube. They are usually incidental findings and rarely cause clinically significant. The 12-year-old girl presented with acute right lower abdominal pain with nausea and vomiting that made suspected the clinical diagnosis of acute appendicitis. Emergency laparotomy was performed. The operation revealed normal appendix, normal both ovaries and Fallopian tubes but torsion of 2 hydatids of Morgagni around each other pedicles and mesosalpinx to form true knots at the right side. Detorsion, cystectomy and appendectomy were done. The postoperative course was uneventful.

Keywords: hydatid of Morgagni, torsion, twisted

Introduction

Small pedunculated cystic structure in the region of the fimbriae known as hydatid of Morgagni was first described by Morgagni in 1790.⁽¹⁾ Hydatids of Morgagni are common embryonal remnants of Wolfian duct.⁽²⁾ Typically, the hydatid of Morgagni is a small oval or spherical structure about 8 mm and rarely exceed 1-2 cm in diameter, lined with a single layer of cuboid or columnar epithelium. It is usually single but may be multiple, frequently occur bilaterally. It may be sessile or have a pedicle up to 12 cm long. The average length is about 3 cm. Because of their small size, these lesions are usually discovered as incidental findings at laparotomy or laparoscopy and rarely caused clinical significant.⁽³⁻⁸⁾ This is a case of torsion of the hydatids of Morgagni in premenarchal adolescent that presented like acute appendicitis.

Case Report

A 12-year-old girl who was premenarchal virgins and no personal diseases. She was complaining of acute pain in her right lower abdomen. It happened when she was sleeping about 18 hours before admission. This pain made her awaked. The intensity was increased but not radiated to other side. She also had nausea and vomiting but her appetite was not affected. She had no fever. About 17 days before she had an acute attack of pain, nausea and vomiting liked these but not too much which lasted for 4-5 days and subsided spontaneously. She remained well until the present time.

On physical examination, the patient was mild to moderate dehydrate. A temperature was 37°C, pulse was 89/min and blood pressure was 114/64 mmHg. Her abdomen was soft with tender at right lower quadrant, especially in the region of the appendix

but no rebound tenderness. White blood count was 15,800/mm³ with 87.3% neutrophil. Hematocrit was 36.8%. Urine specific gravity was 1.030, albumin was trace. Urine ketone was 3+. White blood cells and red blood cells in urine were normal.

In view of the finding, clinical diagnosis was acute appendicitis and laparotomy was performed via Lanz incision under general anesthesia. The operation

showed normal appendix. On exploring, both ovaries and Fallopian tubes were normal but torsion of 2 hydatids of Morgagni, 5 mm and 7 mm around each other pedicles and mesosalpinx to form true knots at the right side (Fig.1,2). Non twisted cyst, 6 mm at the left side. Detorsion, cystectomy and appendectomy were done. The postoperative course was uneventful. She was discharged on the 4th postoperative day.



Fig. 1. Torsion of 2 hydatids of Morgagni around each other pedicles and mesosalpinx to form true knots at the right adnexa.



Fig. 2. Posterior part of mesosalpinx.



Fig. 3. Both hydatids of Morgagni and mesosalpinx after detorsion.

Discussion

Hydatids of Morgagni are common incidental findings in operative specimens with other pelvic pathology as the primary indication for pelvic surgery and usually no clinically significant.^(4,5) They are reported to be present in 50% of women. Torsion of the hydatid of Morgagni is an extremely rare

occurrence. It was first reported by Kelly in 1906.⁽¹⁾

Most of the patients with torsion were postmenarchal young women. Cystic dilation of these paratubal lesions are probably due to the secretory activity of the tubal type of epithelium after the onset of hormonal activity and the risk of torsion is increased.^(4,6,7) But this case was premenarchal.

Some authors had reported that they caused complications during pregnancy^(1,3) but they did not believe that pregnancy was a predisposing factor. Rather, pregnant women probably are more concerned about themselves and their physicians are more solicitous. Some author reported that torsion of the hydatid of morgagni was an incidental finding during cesarean delivery due to cephalopelvic disproportion after try vaginal delivery.⁽⁵⁾

Pansky et al⁽⁷⁾ described three different torsion mechanisms : torsion of the hydatid of Morgagni with intact adnexa that is similar to this case, torsion of the adnexa together with torsion of the hydatid of Morgagni, and torsion and entanglement of the hydatid of Morgagni's pedicle around the distal fallopian tube. The hydatid of Morgagni been implicated in adnexal torsion due to the free end of the Fallopian tube was rendered heavier by cyst and thus more susceptible to rotation.⁽⁸⁾

The pain, the most presenting symptom, is usually colicky or clamp-like as intermittent or constant. The intensity varies from mild to severe with localized lower abdomen. It may be an antecedent history of previous attacks, over a period of from weeks to years. Nausea and vomiting are frequently present and are associated with the onset of pain, whereas in appendicitis these symptoms do not occur immediately. The temperature usually is less than 101°F and the pulse under 96/min. White blood count is rarely greater than 15,000/mm.^(1,3,6,7,9)

The physical examination was not significant. It revealed abdominal tenderness and sometimes rigid over the involve area. Bimanual findings were not helpful.⁽³⁾ It usually found on the right side, probably due to the fact that right lower abdominal pain is regarded more seriously and surgery is advised, while pain in left lower abdomen is often treated conservatively.

These symptoms arising closely resemble those of acute appendicitis especially on the right side. When the patient is operated and appendix was normal, the pelvic organs should be examined especially when serosanguineous fluid was found.⁽³⁾ Adnexal-sparing procedure (detorsion and cystectomy) should be done.⁽⁷⁾

Pedunculated hydatids of Morgagni encountered during surgical procedures should be removed prophylactically because the cysts could later enlarge and /or be subjected to torsion.^(3,9) This procedure could also beneficial in case of infertility. It is possible that these cysts usually found near the fimbriated end of the tube, might interfere with ability of tube to pick up the egg from the adjacent ovary.^(4,9)

Conclusion

Torsion of the the hydatids of Morgagni is rarely reported and most likely is a rare occurrence. It should be included in the differential diagnosis in young women with acute abdominal pain. The pelvic organs should be examined especially when preoperative diagnosis made acute appendicitis and nothing is found.

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