รายงานผู้ป่วย

Isolated torsion of the fallopian tube

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Isolated torsion of the fallopian tube is a very rare emergency surgical condition which is very difficult to diagnosis before surgery. We report two cases of isolated torsion of the fallopian tube. These two cases had different clinical findings and different predisposing factors. Preoperative diagnosis were acute appendicitis in the first case and twisted ovarian cyst in the second case. Both of the patients had torsion of the right fallopian tube. Salpingectomy was done in both patients. The patients condition improved after surgery without serious complications.

Key word : *Isolated torsion of the fallopian tube.*

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การหมุนบิดขั้วของหลอดมดลูกที่ปกติเป็นสภาวะฉุกเฉินทางศัลยกรรมที่พบได้น้อยมาก เนื่องจากการวินิจฉัยก่อนผ่าตัดทำได้ยาก รายงานนี้นำเสนอผู้ป่วยสองรายซึ่งมีประวัติการป่วยและอาการแสดงที่แตกต่างกัน มีปัจจัยส่งเสริมที่แตกต่างกัน ในรายแรกได้รับการวินิจฉัยก่อนผ่าตัดว่าเป็นไส้ติ่งอักเสบเฉียบพลัน ส่วนรายที่สองได้รับการวินิจฉัยก่อนผ่าตัดเป็นภาวะบิดขั้วของถุงน้ำรังไข่ ในการผ่าตัดพบว่าผู้ป่วยทั้งสองรายมีการบิดขั้วของหลอดมดลูกข้างขวา ได้ทำการรักษาโดยการตัดหลอดมดลูกที่บิดขั้วออก และไม่พบภาวะแทรกซ้อนรุนแรงใดๆ หลังผ่าตัดผู้ป่วยทั้งสองราย

Isolated torsion of a normal fallopian tube is a surgical emergency which is virtually never diagnosed preoperatively because of its rarity. And the lack of definitive clinical signs and its similarity to other diseases make it very difficult to diagnose. Early exploration could result in more frequent salvage of viable tissue. Two new case reports are discussed.

Case I. A 37-year-old gravida 4, para 4 , female who had a post tubal resection by Pomeroy's technique 2 years earlier. She came to the hospital emergency room on Nov. 8, 1997 with a complaint of intermittent right lower abdominal pain for 5 days. Her last menstrual period was on Oct. 11, 1997. No other associated symptoms were noted except for a mild degree of nausea and vomitting. The pain progressed to severe. Physical examination showed normal temperature with pulse rate of 84/min. There was marked direct and rebound tenderness in lower abdomen. A pelvic examination could not beconducted due to the patient's discomfort. The hematocrit was 34% and the leukocyte count 20,900/cu.mm. with neutrophils 83%. Exploratory laparotomy for the initial diagnosis of acute appendicitis was performed. The operation revealed a normal appendix, but the distal portion of the right fallopian tube showed a 720 degree clockwise (three rounds) volvulous with a gangrenous appearance. It was enlarged to 5 by 3 cms. Both ovaries looked totally normal by gross examination. A right salpingectomy and appendectomy was done. The patient was discharged in good condition on the fourth postoperative day. The pathological report was "hydrosalpinx with necrosis and hemorrhage."

Case II. A 27-year-old gravida 1, para 0 female was admitted on Jun. 3, 1996 because of acute, colicky pain in the right lower abdomen. The pain had commenced 15 hours earlier when she changed her position lieing on a bed. The pain radiated to her right thigh. Nausea, vomitting and low grade fever developed 10 hours prior to admission. Her last medical history revealed that she had taken antiobesity agents for one year. Her last menstrual period was on May 14, 1996.

On admission, her body temperature was 37.7°c . Examination of the abdomen disclosed mild tenderness with guarding and rebound tenderness at the right lower quadrant. Pelvic examination was unremarkable except for a tender, mobile right adnexal mass about 5 cms in diameter. The hematocrit was 45% and the leukocyte count 19,700/cu.mm. with the neutrophils 87%. Urinalysis was normal. A mix-echoic mass, 5 cms in diameter, at the right adnexa was found by transvaginal ultrasonography. The ovaries were not clearly seen. The diagnosis was a twisted right ovarian cyst and an operation was performed. In the operative finding, torsion of the right fallopian tube was found and it had twisted about four full rounds on its mesosalpinx and formed into a gangrenous psuedocyst of about 4 by 5 cms. size at the distal part of the fallopian tube. Both ovaries appeared normal. The left fallopian tube was 14 cms in length without gross pathology. A right salpingectomy was performed with a pathological report of " hemorrhage and necrosis of the fallopian tube." The postoperative course was without complications and she was discharged on the fifth postoperative day. She was in good health on her four - weeks follow - up.

Discussion

Since 1890, there have been only about 33 reported cases of isolated torsion of the fallopian tube.[1] The incidence is about 1 in 1.5 million persons per year.[2] Most of cases occurred in the reproductive age, especially between 15-25 years,[3] but it can also occur in either premenarcheal girls[4] or pregnant women.[5]

The etiology remains unknown, but there are several theories believed to play a role.[6]

1. The anatomic theory is malformation of the mesosalpinx or tube, e.g., long mesosalpinx, or hydratid cyst of Morgagni.
2. The physiological theory is that abnormal peristalsis of the tube may lead to spasms and torsion and that even drugs could,perhaps, cause such spasms. In our second case, the patient had used antiobesity agents that might cause abnormal peristalsis.
3. The hemodynamic theory is that the veins of the mesosalpinx are longer and more flexible than the arteries and if there is venous congestion, they may assume a spiral course which favors torsion.
4. The selheim theory is that sudden changes of body position may lead to abnormal motion of internal genitalia. We found this clinical feature in our second case.
5. The traumatic theory is that trauma may lead to abnormal situations that could favor torsion.
6. Previous tubal surgery. In the first case, post tubal resection by Pomeroy's technique is believed to have played a role in the torsion of the fallopian tube.

There is no specific clinical finding, and pain is the only universal presenting symptom.[7] The pain may be of short duration, or recurrent over various periods, depending on the chronicity of the event. The different clinical features between these were two cases observable. In the first case, the pain was intermittent but with an insidious onset. But in the second case the pain had a sudden onset. Nausea and vomitting were frequent and the temperature and leukocyte count were only slightly elevated or were normal.

Special characteristics that are of general interest.[6]

1. Most of the reports, including these two cases, have of involvement on the right side because the sigmoid colon is on the left.
2. Most of the patients were still in their menstrual years.
3. The opposite adnexa are usually normal.
4. Spontaneous amputation may be the end result in some nonsurgical patients.

The correct diagnosis is rarely confirmed preoperatively.[7] Usually preoperative diagnosis include appendicitis, twisted ovarian cyst or ectopic pregnancy.[7] Two new diagnostic methods, ultrasonograms and laparoscopy, have come into more widespread use[8] and they may help in early diagnosis before the tube is infarcted.

In the first case the preoperative diagnosis was acute appendicitis, and in the second it was a twisted ovarian cyst, when the laparotomy was performed, the tube had already infarcted, and excision

of the infarcted tissue was necessary.[7] But in case of an incompletely twisted tube, the treatment should be as conservative as posssible.[7] Releasing the twisted tube and observing tissue viable should be done.

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