Late Complication of Laparoscopic Salpingoophorectomy: Retained Foreign Body Presenting as an Acute Abdomen

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ABSTRACT

Background: Laparoscopy is widely used as a tool in many clinical situations allowing for diagnosis and/or surgical management in a minimally invasive fashion. Most laparoscopic cases are ambulatory and allow patients to recover quickly. Nonetheless, attention to surgical technique is paramount to avoid both short and long term complications.

Case: A 32-year-old woman had a laparoscopy and a reported left salpingoophorectomy for benign disease of the ovary in September, 1994. Shortly thereafter, in January, 1995, she was diagnosed with an intrauterine pregnancy and delivered in October of 1995 by spontaneous vaginal delivery. The pregnancy and delivery were both uncomplicated. The patient presented four weeks postpartum with clinical suspicion of appendicitis. However, at the time of laparotomy, the patient was found to have a retained foreign body from her prior laparoscopy in the right lower quadrant with a pelvic abscess and evidence of prior right salpingoophorectomy. The appendix appeared grossly normal.

Conclusion: Laparoscopy is a safe, effective modality for various surgical and gynecologic conditions. Although laparoscopy is usually done on an outpatient basis, complications can manifest several weeks or months later. This case illustrates and reminds us of the importance of adherence to surgical laparoscopic principles. These include direct visualization when removing equipment and a complete count of surgical instrumentation to confirm the integrity of such at the end of each procedure.

Key Words: Laparoscopy, Foreign body

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INTRODUCTION

Laparoscopy for the management of gynecologic conditions is commonplace today. Procedures from tubal ligation to bladder neck suspension are done through the laparoscope. Operative time is acceptable and recovery periods are significantly less than in open procedures with no significant difference in morbidity and/or mortality, even in pregnancy.[1]

Case Report:

A 32-year-old white woman presented to the gynecologic emergency room on November 21, 1995, complaining of tenderness and swelling of her right lower quadrant for three days. At that time she was four weeks postpartum from a spontaneous vaginal delivery. She also reported fevers, nausea and anorexia for the same time period. The pain was sharp, crampy and intermittent. Her surgical history was significant for a laparoscopy done in September of 1994 in Vienna, Austria, where a left salpingoophorectomy reportedly was performed for an ovarian cyst. Her history was otherwise noncontributory.

On physical examination, the patient had a temperature of 100.8°F, with stable vital signs. Her abdomen was diffusely tender throughout, with right lower quadrant guarding and rebound. Pelvic examination revealed a normal uterus with a right adnexal mass approximately 8 cm in size, and exquisitely tender to palpation. WBC count was 11,000/mL with a hemoglobin of 13.1 g/dL. A urine pregnancy test was negative. Abdominopelvic CT scan revealed a 5.5 cm x 4 cm x 5.3 cm right adnexal mass, inflammatory in nature. In addition to this, a 4.3 cm x 6 cm x 3.4 cm mass was superior to the first mass, in the right lower quadrant, and also inflammatory in nature. These findings were confirmed by gynecologic ultrasound. Radiologic impression could not rule out a periappendiceal abscess.

The patient was taken to the operating room by the gynecologic service for an exploratory laparotomy. Intraoperatively, a normal left adnexae was found, not consistent with the patient's history of left salpingoophorectomy. On the right side there was a large, 10 cm x 12 cm inflammatory mass with the appearance of an abscess. Clearly above this mass, a 3 cm x 2 cm portion of synthet-

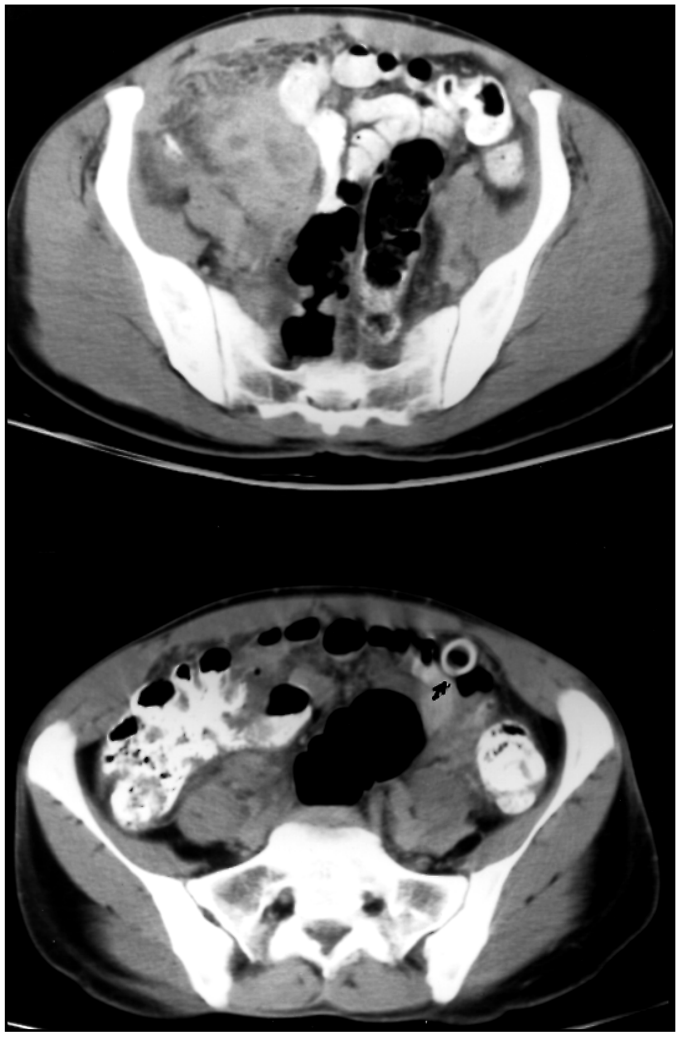

Figure 1. Top: Pelvic abscess in right lower quadrant. Bottom: Foreign body seen (arrow).

ic tubing was found enveloped by omentum **(Figure 1)**. This tubing corresponds to the sleeve thread used in laparoscopy. At this time a partial omentectomy and removal of foreign body was performed, along with an excision of the right pelvic abscess and appendectomy.

Postoperatively the patient recovered slowly. Nasogastric suction was discontinued on postoperative day number two and her diet was advanced. Antibiotics were continued until the patient was afebrile for 48 hours. By postoperative day number five the patient was tolerating a regular diet and ambulating without assistance. She was discharged home on postoperative day number six in stable condition.

The patient was seen in the postoperative clinic at four weeks and was doing well with no specific complaints. Pathology reports revealed the foreign body to be synthetic tubing and the pelvic mass to be soft tissue with extensive scarring and acute suppurative inflammation with focal abscess formation. There were no signs of acute appendicitis.

DISCUSSION

Complications from laparoscopy such as bleeding or structural injury can usually be recognized immediately intraoperatively. Other events can present in the perioperative period or shortly thereafter. The variety of these complications continues to grow as laparoscopic applications continue to broaden.

This case reports a rare complication of laparoscopy, a retained foreign body. What makes this case unusual is the time interval (14 months) and the fact that the patient had an intervening pregnancy. It is theorized that the device must have been defective and when removing the sleeve thread anchor, probably with the trocar as a whole unit, a portion of it was sheared off and remained intraabdominally.

The presentation of the patient was also atypical in that clinical evidence pointed to appendicitis. It is unclear whether the pelvic abscess was directly related to the retained foreign body or if there was another etiology. The authors favor the foreign body as the source since laparotomy revealed normal bowel and absence of the right adnexae in this patient. These facts exclude appendicitis and tubo-ovarian abscess as alternative diagnoses. It is strongly suspected that the presence of a foreign body associated with the physiologic changes in the postpartum period combined to provide a favorable environment for abscess formation.

In the literature, most articles and case reports deal with complications of laparoscopic cholecystectomy.[2-4] Gynecologic laparoscopy contains an equally challenging repertoire of procedures for the laparoscopist.[5] Both short- and long-term complications exist and precautions to avoid these should be paramount. Although most complications are related to hemorrhage, bowel or genitourinary injury, the rare case of a retained foreign body from laparoscopic equipment must be considered.[6] The trend to move to one-piece disposable units where the trocar is self-retaining is one step in the direction of both simplification of laparoscopic procedures and prevention of postoperative complications.

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