

Migration of Intrauterine Device and Acute Abdomen

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Introduction

Intrauterine device is the most commonly used contraception method in our country due to its reversible, low risk and low cost¹. Relatively frequent complications such as ectopic pregnancy and infection may develop due to IUD, also rarely it can damage to organs through uterine perforation and migration to neighboring organs and intraabdominal region. Risk of perforation and migration is reported as 0.05-13 / 1000². Especially, the insertion of IUD in the first three months postpartum increases the risk of complications. Therefore, it is recommended to be insertion from the 6th month¹. In this study, we presented the case of intra-abdominal IUD, which caused abdominal pain in a 31-year-old female patient.

Case

A 31-year-old female patient presented to the emergency department with dysuria and pain in the lower abdomen for 3 days. It was learned that the patient who gave birth vaginally 40 days ago was inserted IUD 3 days ago. Vital signs were within normal limits. Abdominal examination revealed tenderness in the left lower quadrant and in the suprapubic region. Routine laboratory studies revealed the following ; white cell count (WBC) : 7500/ml; C-reactive protein : 1,64 mg/dl. The urinalyase demonstrated WBC 7 / HPF, RBC 9 / HPF and leukocyte (2+). Abdominal x-ray and abdominal USG, were taken to determine the etiology of abdominal pain, revealed that IUD was not in the uterine cavity (Figure-1). A CT scan revealed that the IUD migrated into the abdomen to the left superolateral adjacent region of the uterus (Figures 2 and 3). The patient was consulted with Gynecology Service. IUD embedded in the omentum, was removed by laparoscopy. There was no any complication or

organ damage as perforation. The patient received antibiotic treatment for 5 days postoperatively, was discharged without any complications.

Discussion

Intrauterine devices (IUDs) are a commonly used, effective and reversible contraception methods³. While the rate of use is 9.4% in developed countries, it is 16.4% in undeveloped countries⁴. Relatively frequent complications of IUD include, abdominal or pelvic pain and abnormal bleeding, especially during the first few months after its insertion. Other adverse effects are expulsion, heavy bleeding, dysmenorrhea, unplanned pregnancy, and spontaneous abortion³. One of the serious complications that may develop due to IUD is uterine perforation. It is rare but can be fatal. Two types of uterine perforation exist. Primary perforation may occur during insertion, which is associated with severe abdominal pain. Secondary perforation is a delayed event, proposed to be due to gradual pressure necrosis of the uterine wall. Delayed rupture can be due to uterine spasms⁵. Approximately 80% of IUDs migrate into peritoneal cavity after perforation. Omentum, rectosigmoid colon, peritoneum, bladder, appendix, small bowel, adnexa, and iliac vein are possible sites of migration⁶.

These patients generally present with not finding the device string. They may be asymptomatic or have nonspecific symptoms such as abdominal pain, nausea and vomiting, constipation, fever, anorexia^{6,7}.

Diagnosis generally made by missing device string. As a diagnostic method, transabdominally or transvaginally ultrasonography is a safe, convenient and non-invasive method. Other radiological examinations (x-ray, tomography, magnetic resonance) are preferred diagnostic methods to evaluate complications or when there is a possibility of far-migrated intra-abdominal intrauterine device⁸.

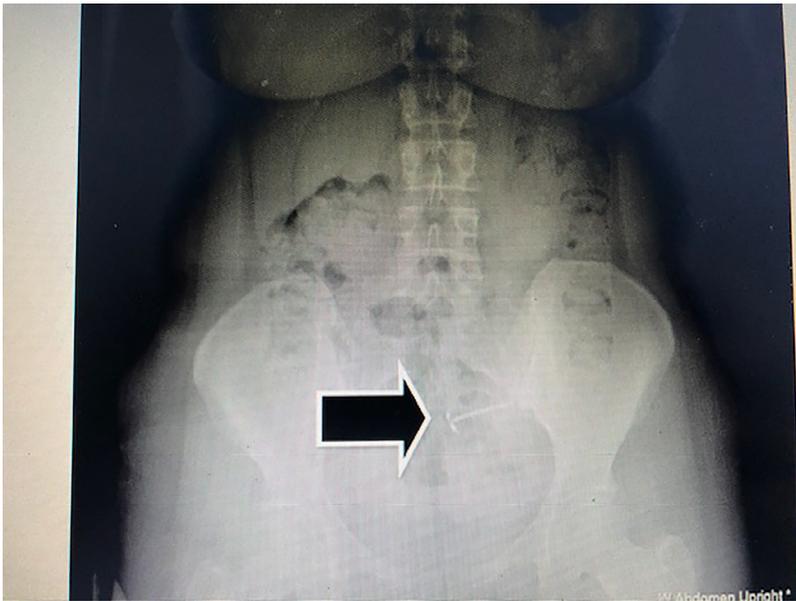


Figure -1. IUD is outside the uterine cavity.

Figure -2. IUD is outside the uterine cavity.

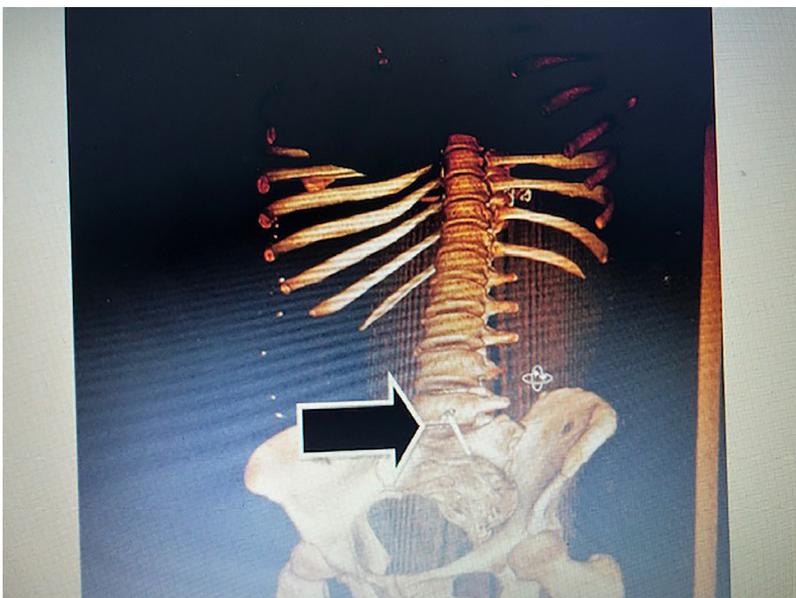


Figure -3. 3 D image of CT scan.

The World Health Organization recommends removing the migrated device as soon as possible. It is suggested that surgical removal should be considered even in asymptomatic patients⁹. It is recommended that to use minimally invasive methods if possible, including hysteroscopy, cystoscopy, colonoscopy, or laparoscopy. If the device is embedded in an organ, exploratory laparotomy should be performed, not minimally invasive methods⁵.

be performed only by experienced healthcare professionals to prevent possible complications. Patients should be monitored closely and the device should be changed when the expiration date expires. Especially, the insertion of IUD in the first three months postpartum increases the risk of complications. Therefore, it is recommended to be insertion from the 6th month.

Conclusion

Serious complications related to IUD are not common and mostly occur during IUD insertion. This procedure should

