Laparoscopic retrieval of perforated intrauterine devices: A case report

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Abstract

Intrauterine devices (IUDs) copper-T were retrieved laparoscopically from the abdomen which was the complication of complete perforation of the uterine wall. IUDs were located by ultrasound and a radiograph after that laparoscopy was performed under general anesthesia. The devices were easily detected and one case it was removed from the anterior abdominal wall with adhesion formation by omentum, another from posterior wall with bowel and omental adhesion formation. All patients were discharged after 24 hours without any complication.

Introduction

Copper T (IUD) is long time effective and reversible contraceptive method and is popular in our country recently since their introduction in 1965. About 15 - 40 years women are using the IUD in our country. One complication is perforation of uterus at the time of insertion, which occurs in approximately 1/1000 to 1/2500 insertions\(^1\). The IUD usually perforates at one of the three sites: fundus, body of the uterus, or wall of the cervix. Perforations may be partial that is part of the IUD passing through the uterine wall or cervix or completely passing though the uterine wall into the abdominal cavity. Copper can cause an inflammatory reaction and adhesions in the abdominal cavity so it should be removed as soon as possible. The medical advisory parenthood foundation considers this necessary only if the women has abdominal symptoms\(^2\).

Operative laparoscopy has proved to be safe in removing extrauterine IUDs\(^3,4\). If there is bowel perforation or dense intra abdominal adhesion then conversion from laparoscopy to laparotomy was recommended.

Method

All procedures were done under general anesthesia. After pneumo-peritoneum was established, a 10mm canula was placed through a sub-umbilical incision and laparoscope was introduced and two additional 5mm ports were placed right and left lower quadrants, respectively for using accessory instruments.

Case report

Patient no.1

A 24 year old women para -2 had IUD inserted just at the end of her menstrual cycle. During insertion she felt severe pain in the lower abdomen. One day later she could not feel the string and complained it in Upozilla family planning centre. FWAs and the doctor could not find it by sounding. Ultrasound and X-ray detected it was not in the uterus and advised to remove it. The patient remained asymptomatic for one year and consult with Gynaecologist for removal after one year. At laparoscopy, Omental adhesion was found on the anterior abdominal wall. After separation of adhesion CU-T with string was visible beneath them, which was grasped and

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removed through 5mm canula, the field was irrigated, minimal bleeding, bilateral tubal occlusion was performed by bipolar coagulation and cutting. She was discharged 24 hours and post-operative period was uneventful.

**Patient no.2**
Another women 30 years old para 3 inserted CU-T after menstrual regulation. She could not felt string after one month and felt dull ache pain in lower abdomen. An ultrasound and abdominal radiography detected the device in the abdominal cavity. At laparoscopy bowel and omental adhesion was seen on the posterior uterine wall. After separation of adhesion CU-T removed through the 5mm canula. Total procedure was completed within 35 minutes. Bilateral tubal occlusion was done on the same time. Post-operative days were uneventful.

**Discussion**
During IUDs insertion uterine perforation is not common but is one of the more serious complications and it occurs in form 1 in 350 to 1 in 25005. Perforation of the viscera, bowel, appendix, bladder as well as impending visceral perforation have been reported as complications after uterine perforation with IUDs. Removal of perforated medicated IUDs is recommended. In our first patient's perforation has been occurred by forceful insertion and 2nd. case's after completion of MR, uterus was soft. In case control analysis breast feeding women had a more than 10 fold greater risk of uterine perforation at IUD insertion than non breast feeding women. We had successfully removed the IUDs through 5mm port with minimal bleeding. Laparoscopy, being less invasive, is now performed as a safe and successful procedure but sometimes migration of IUDs can perforate the sigmoid colon or other viscus, bowel preparation should be done before surgery for possible intestinal involvement and laparoscopy to laparatomy conversion should be considered.

**References**
8. Chi I: What have we learned from recent IUD studies: A researcher's prespective. Contraception 48:90 - 91, 199