Unusual Case

Rectum migration of an intrauterine device

Rui Li, Hongmei Li, Jie Zhang, Huiqing Li

Maternity and Child Care Center of Qinhuangdao, Qinhuangdao, Hebei Province, China

Abstract

Intrauterine device (IUD) is a well-accepted means of contraception. Although it is safe and effective, some serious complications may occur. It should be paid attention to a 45-year-old female admitted to the hospital for aggravated abdominal pain and dyspareunia for 2 months. She was found to have two IUDs in her body, one in the uterine cavity and the other outside. They were removed through laparoscopic and hysteroscopy. When IUD perforation occurs, whether symptomatic or not, surgical removal is necessary. Laparoscopy is thought to be the first choice. However, when serious adhesions coexist, laparotomy would be recommended.

Keywords: Intrauterine device, laparoscopy, migration, rectum

INTRODUCTION

Intrauterine device (IUD) is a reversible birth control method, which is relatively safe and effective. It is recommended as first-line contraception by the World Health Organization (WHO).[1] Chinese accounts for 80% of the total IUD user in the world according to statistics. The major complications are displacement and unsuccessful retention. IUD ectopic is a serious complication although it is infrequent. The incidence is reported to be between 1.3 and 1.6/1000 insertions.[2] We report a case of a 45-year-old female, with one of the two IUDs penetrated to the wall of the rectum that became symptomatic 26 years after insertion and discuss the management of this situation. This case has been reported in line with the SCARE criteria.[3]

CASE REPORT

A 45-year-old female without any notable medical history, had a history of an IUD insertion at the 12 week of her puerperal period. Two months later, an unintended pregnancy occurred. During the abortion the IUD string was not visualised. It was thought to be expelled and a new IUD was inserted. From then on, the patient showed intermittent abdominal pain and admitted to our hospital for aggravated pain and dyspareunia for 2 months.

On admission to our clinic, she had normal vital signs. On clinical examination at admission, the patient had a good general condition, but with tenderness in the left accessory area. Laboratory test showed leucocytosis (white blood cell: 11,700 cells/mm³). The transvaginal ultrasound revealed two IUDs: one intrauterine and the other outside the cavity, close to the cervix. Abdominal computerised tomography scan confirmed the migration of the second IUD, with closely related to the rectum [Figure 1]. The diagnosis of uterine perforation with IUD migration was made, and after anti-inflammatory treatment, surgical removal was planned. Laparoscopic removal was performed. An IUD was
found to be embedded in the wall of the rectum [Figure 2]. Fortunately, the rectum wall was not completely penetrated. The operation was smooth and the postoperative course was uneventful. At the same time, the IUD within the cavity was also removed through hysteroscopy. On follow-up at 1 month, the patient was asymptomatic.

**DISCUSSION**

IUD is a safe, effective and reversible method of contraception. According to the WHO, it recommends 24 months after birth for the next pregnancy, so that IUD as a long-acting method become increasingly popular. However, it has some disadvantages such as migration and perforation. By analysing the risk factors for IUD perforation, the primary may be linked to the insertion period (at the early puerperal period when the uterus is soft and thin walled), which takes up 63.6%. Furthermore, they may as well be linked to the device itself, such as its structure and texture, or the inadequate experience and training of operators, not the profession. In our case, the patient's first IUD was inserted at 12-week postpartum during the lactation period, which may be a risk factor for IUD perforation. To avoid this complication, it is recommended that the IUD insertion procedure be performed by an experienced and well-trained doctor after lactation.

Whether it is symptomatic or not, the WHO recommended the surgical removal of a dislocated IUD as soon as possible irrespective of their location and type. In regard to the operative approach, reviews on ectopic IUD surgical extraction showed that laparoscopy is thought to be the first-line choice. However, some experts argue that there is no significant superiority over the laparotomy, especially when serious adhesions coexist. According to reports in the literature, the success rate of laparoscopy varies between 44% and 100% depending on the type of complications and the experience of the operators. However, in some situations, such as abdominal and pelvic organ perforations, laparotomy would be recommended immediately to remove the device and treat the complication. For minority of uncomplicated perforations, minimally invasive techniques including endoscopy can be used to extract the device. It is important to be vigilant that the removal of IUD embedded in the colon wall may lead to severe abdominal complications.

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**Declaration of patient consent**

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.
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Conflicts of interest
There are no conflicts of interest.

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