

MIGRATION OF AN INTRAUTERINE DEVICE TO THE SIGMOID COLON

Rahimiçi aracın sigmoid kolona migrasyonu

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ABSTRACT

Uterine perforation is a serious problem which can occur after intrauterine device (IUD) insertion. Migration of IUD to the pelvic and abdominal cavity or adjacent organs may follow the perforation of the uterus. Migration to a far intra-abdominal site is extremely rare. The patient reported here had 2 years history of IUD placement and had slight gastrointestinal problems during this period. She got pregnant despite an IUD. The IUD was incidentally seen in sigmoid colon mesentery at the secarean section and then referred to us.

This paper presents a case of a 32-year old woman with a copper IUD in the sigmoid colon mesentery noticed during her caesarean section. In this report, clinical presentation and management of this condition were discussed with the literature knowledge.

Key words: Intrauterine device, migration, sigmoid colon

ÖZET

Rahim içi araç (RİA) yerleştirilmesi sonrası ortaya çıkabilen uterus perforasyonu ciddi bir problemdir. Pelvik ve abdominal boşluk ile komşu organlara RİA göçü uterus perforasyonunu takip edebilir. Bu göçün uzak batin içi bölgeye olması oldukça nadir görülür. Bu yazıda RİA yerleştirilmesi sonrası 2 yıllık geçmişi olan ve bu periyotta gastrointestinal problemleri ortaya çıkan bir hastayı sunduk. Bu hasta aynı zamanda RİA ya rağmen hamile kalmıştır. RİA sezaryen sırasında rastlantısal olarak görülmüş ve hastanemize refere edilmiştir.

Bu yazıda sezaryen sırasında sigmoid kolon mezosunda bakır RİA olduğu saptanan 32 yaşında bayan hasta sunuldu ve bu durumun kliniği ve yönetimi literatür bilgileriyle tartışıldı.

Anahtar kelimeler: İntrauterin araç, migrasyon, sigmoid kolon.

INTRODUCTION

Intrauterine device placement is one of the most frequent methods of contraception. Uterine perforation due to an IUD is a rare but serious complication. It is estimated that the rate of perforation is between 0.05 to 13 cases out of 1000 IUD placements (1). Uterine perforation following IUD insertion may be observed during or soon after the procedure or as a delayed event. Delayed rupture can be due to uterine spasms. Following the uterine

rupture, an IUD may potentially migrate to the pelvic or intra-abdominal cavity causing several complications. There are few reports on the far-migration of an IUD. The longer the distance from the uterus, the more likely the patient will have severe symptoms.

We present a patient with a far-migrated intraabdominal IUD causing slight gastrointestinal symptoms that detected incidentally was removed with laparoscopic resection.

Case

A 32-years old woman who got pregnant two years after the IUD insertion presented to our hospital. Ultrasonographic examinations of the patient revealed a live intrauterine pregnancy. Transvaginal ultrasonography demonstrated no IUD. Gynecologist commented that her IUD was dropt unwaringly. She had minimal pelvic and urinary pain during the past one year. Her physical examination was normal. Routine laboratory investigations, including urinalysis, revealed normal findings.

The pregnancy was terminated by cesarian section at normal duration. The gynecologist had seen a string of IUD over the sigmoid colon at cesarian section. The patient was consulted by the general surgeon. But, simultaneous colon operation with cesarian section was not prefered due to dirty colon.

Computerized tomography (CT) of the pelvis and abdomen confirmed the IUD at the left lower quadrant of the abdomen in the mesentery (Figure 1,2). To remove the intra-abdominally far-migrated IUD, we planned a laparoscopic removal of the apparatus. But IUD was found in sigmoid colonic wall. Because of the intracolonic localization and perforation risk we planned laparoscopic resection to remove IUD (Figure 3,4).



Figure 1: Pelvic CT.



Figure 2: Pelvic CT.



Figure 3: IUD in sigmoid colonic wall.

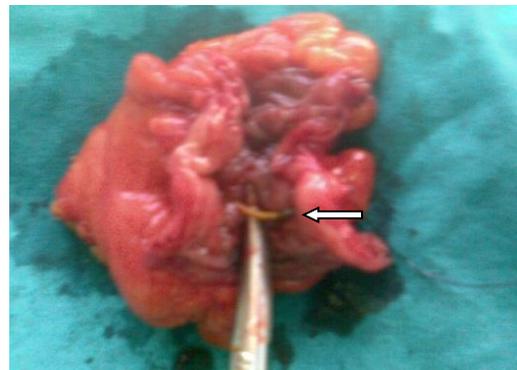


Figure 4: IUD in sigmoid colonic wall.

DISCUSSION

IUD is considered one of the most effective method for contraception (2). IUD migration and colon perforation is a rare but serious complication. Perforation of the uterus due to IUD placement may be seen soon after the procedure or as a delayed event. Perforation tends to occur in the immediate postinsertion period, especially during the first 6 months following insertion, but cases of uterine perforation have also been noted several years after insertion (3,4).

Migration of an IUD to the pelvic and abdominal cavity or neighbouring organs may result in several complications. Most frequent problems include lower urinary tract symptoms, stone formation around the IUD, uterovesical fistula and stricture of the rectosigmoid colon (5,6). Adhesions and bowel perforation were identified in a majority of cases.

IUD's should be examined periodically. Diagnosis of IUD perforation is usually made with the use of imaging modalities that depict the ectopic location of the device. Ultrasound is a simple, rapid and non-invasive imaging method to assess the position of the IUD. When an IUD is not found on a sonogram, a plain radiograph of the abdomen is helpful to determine its location. Other more precise modality as CT assist to identify its localization (7).

Many women with a perforated IUD are asymptomatic, with over 30% of perforations recognized only when pregnancy occurs. Our case was presented when she got pregnant two years after the IUD insertion. Far-migrated IUD in the abdominal cavity may cause inflammation resulting in adhesion formation, intestinal obstruction, abdominal pain and bowel perforation (8,9). The presented case had mild gastrointestinal symptoms.

Management of an asymptomatic mislocated IUD within the abdomen remains controversial. The World Health Organization recommends that all displaced IUDs be removed promptly. It has been mentioned that surgical removal of the IUD located in the abdominal cavity is mandatory, even in asymptomatic patients (5,9,10).

In contrast, Markovitch and colleagues believe that asymptomatic patients may be managed conservatively in some circumstances (11). Laparoscopic removal of the intra-abdominal device should be the preferred choice of surgical management. Laparoscopy is a safe and minimally invasive procedure with less complications, shorter operative time and hospitalization compared to laparotomy.

In our case, IUD migrated into the colonic lumen via the perforation. Because of the intracolonic localization and perforation risk we planned laparoscopic resection to remove IUD. But attempts of retrieval with laparoscopy were unsuccessful. Intrauterine device embedded in sigmoid colon wall was removed with resection of the involved segment and primary anastomosis was performed.

In conclusion; clinicians should be mindful of asymptomatic patients with previously placed IUD's. Periodic follow-up is mandatory. Laparoscopic or open removal of the intra-abdominal IUD is principal even if the patient is asymptomatic. An emergency surgery is among the probable end results of these patients since IUD might induce intestinal bridging and stricture formation in long term.

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