

Bladder Stone and Lower Urinary Tract Symptoms due to Migrated Intrauterine Contraceptive Device: A Case Report and a Brief Review of the Literature

Mesaneyeye Göç Etmış Rahimiçi Araca Bağlı Mesane Taşı ve Alt Üriner Sistem Semptomları : Olgu sunumu ve Literatürün Gözden Geçirilmesi

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ABSTRACT

Migration of an intrauterine device to other internal organs is a rare complication. Mechanism leading to this unusual complication is not clearly known but there are several speculations. A case report and review of the literature is presented in this article.

Key Words: Intrauterine device, migration, bladder.

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ÖZET

Uterusa Rahim içi araç (RİA) takılması sonrası RİA'nın başka organlara yer değiştirmesi nadir gerçekleşen bir komplikasyon olup; bu duruma neden olan mekanizma net olarak bilinmemekle beraber pek çok spekülasyon bulunmaktadır. Bu olgu sunusunda konuyla ilgili makaleler incelenmiştir.

Anahtar Sözcükler : Rahim içi araç, yer değiştirme, mesane

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INTRODUCTION

Intrauterine device(IUD) is the highly preferred method of reversible contraception because of its high efficiency and safeness (1-2). However, complications such as discomfort (3), lower urinary tract symptoms (4-5), infertility (6), PID (7), sepsis (3) have been reported in the literature. Also transvesical migration or misplacement of an IUD is a rare complication (2-8-9). The aim of this case report is to show that persistent urinary infection of a woman with IUD may be associated with intravesical migration and stone formation in bladder.

CASE REPORT

A 40-year-old married female patient, who has an intrauterine device for four years, was directed to our outpatient clinic by the department of obstetrics and gynecology, as the lost device was found in her bladder on ultrasonography examination. Even though she had an intrauterine device, she has got pregnant unexpectedly and had a two years old child. She was suffering from disuria. In laboratory examination, she had mild pyuria and hematuria, but her urine culture was negative. Ultrasonic examination showed an echogenic intravesical lesion which suggested a calcified foreign body.

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Her lower abdomen computed tomography findings were compatible with a calcified foreign body in bladder, which was partially embedded to bladder wall (figure 1). Cystoscopy was performed and foreign body with calcification was seen at the dome of the bladder. Cystoscopic extraction of the RIA resulted in fragmentation but all the pieces were retrieved successfully (figure 2). Catheterization for five days was sufficient for bladder wall healing.

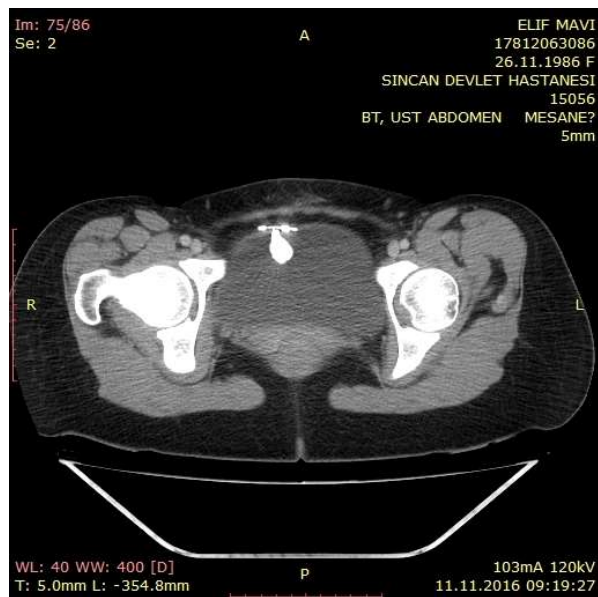


Figure 1: CT image of calcified IUD.

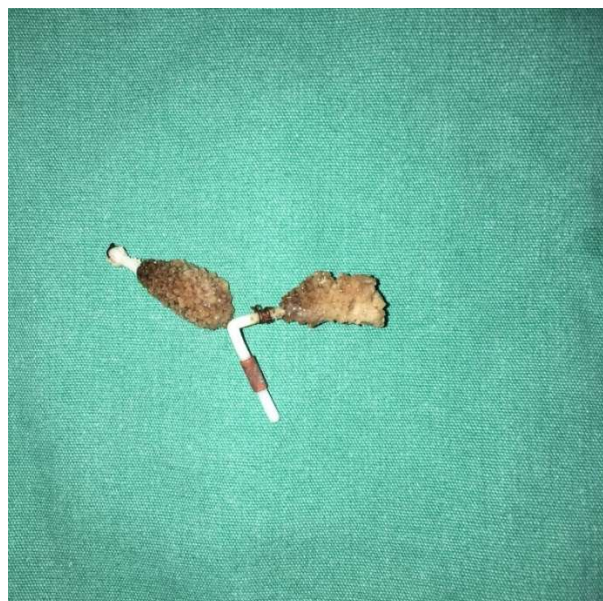


Figure 2: Calcified IUD after extraction

DISCUSSION

Intrauterine device migration and intravesical translocation is rare complication (8-9). Intrauterine device translocation is seen in less than 0.1 % of the cases (10). Mechanisms that have been put forward to explain migration of IUD are, uterine and bladder contractions, gut peristalsis and peritoneal fluid movements (11). Also, other risk factors leading to uterine perforation are uterine thickness, uterine position, uterine consistency, time of insertion (especially in the first 3 months after delivery), congenital uterine anomalies, former pelvic surgeries, and genital infections (10). Transmigration to gastrointestinal system, peritoneum, omentum, appendix, adnexa, iliac vein and inguinal ring have been reported (12-13-14-15). Misplacement is also a possibility (16). The reported symptoms of intravesical IUD are frequency, hematuria, dysuria, pelvic pain and those related to recurrent urinary tract infections (4-5).

Peritonitis, appendicitis, ileus, sexual dysfunction, obstructive nephropathy, infertility due to intraperitoneal adhesions, vesicouterine fistula with menuria, and death due to sepsis or pulmonary embolism have also been reported due to migration (17-18-19-20-21). In our case, there were only lower urinary tract symptoms. Some cases are asymptomatic (22). At radiological imaging, calcified intrauterine or intravesical devices can be misdiagnosed as a bladder stone (5). Migrated IUDs must be removed (22-23) to avoid further complications.

CONCLUSION

Although it is a rare complication, pregnancy despite an IUD, should raise the suspicion of migrated IUD. Bladder is one of the sites of migration and must be suspected in cases with lower urinary tract symptoms.

Conflict of interest

No conflict of interest was declared by the authors.

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