Intravesical Migration of a Copper T Intrauterine Device with Calculus Formation in a Postmenopausal Woman: Case Report

Postmenopozal Kadında Mesane İçerisinde Taşlaşmış Bakırlı Rahim İçi Araç

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ABSTRACT We report a postmenopausal woman with intravesical migration of intrauterine device (IUD) with copper that caused secondary calculus formation. The patient presented with irritative voiding symptoms, hematuria and recurrent urinary tract infections. The diagnosis was made using ultrasonography. We performed histeroscopy to search the cause of postmenapausal bleeding. A piece of IUD was found within the isthmus of uterine cavity and full curretage was performed. We did cystoscopy. The IUD with a calculus formation on one of its horizontal arms was seen. We preferred cystotomy because of the big size of the calculus. We carefully observed the IUD again and we noticed that the IUD had no defect. So we concluded that a piece of IUD that was inserted 25 years ago provided contraception in this case.

Key Words: Contraceptive devices, calculi

ÖZET Postmenopozal kadında mesaneye migrasyon yapmış ve ikincil olarak mesanede taş oluşumuna neden olmuş bakırlı rahim içi araç (RİA) olgusunu yayınlamak istedik. Olguda irritatif üriner yakınmalar, hematüri ve tekrarlayan üriner sistem enfeksiyonları izlenmektedir. Postmenopozal vajinal kanama yakınması ile gelen olguda tanı ultrasonografi ile konmuştur. Histerekopide istmik seviyede RİA parçası izlenmiştir ve endometriyal biyopsi alınmıştır. Sistoskopide mesane içerisinde bakırlı RİA ve kollarının birinde taş formasyonu izlenmiştir. Açık sistotomi yapılarak taş ve RİA çıkarılmıştır. Yapılan değerlendirmede RİA'da eksiklik bulunmamaktadır. Bu nedenle 25 yıl önce takılmış olan ilk RİA'dan kalan parçanın olguda kontrasepsiyon sağladığına inanmaktayız.

Anahtar Kelimeler: İntrauterin araç, mesanede taş

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The intrauterine device (IUD) is the most widely used method of reversible contraception and; currently, more than 100 million women are have been using IUD for contraception.[1] Despite of its safety and efficacy, the IUDs have some complications. These are septic abortion, pelvic abscess, ectopic pregnancy and uterine perforation.[2-4] Uterine perforation and migration to the adjacent tissues are the unusual complications of IUDs. We report a postmenopausal patient with intravesical migration of IUD with secondary calculus formation who presented with irritative voiding symptoms, hematuria and recurrent urinary tract infections.

CASE REPORT

A 54-year-old woman, gravida 7 parity 5, was on menopause for 2 years and she applied to our gynecology unit with the complaint of abnormal vaginal bleeding. It was learned that she had difficulty of voiding and a burning sensation, and as well as urgency for the last two years.

Physical examination was normal, including bimanual vaginal examination. Urine analysis revealed five to six leukocytes and ten to eleven erythtrocytes per high power field, and urine culture remained sterile. Other laboratory findings including a complete blood count and blood chemistry profile were within the normal levelslimits. While we did theWe performed a transvaginal ultrasonography to search the cause of the postmenopauseal bleeding, we and noticed that there was an IUD in the bladder (Figure 1). On questioning, The patient had a history of an IUD insertion 25 years ago. After 5 year The IUD was removed five years later, and then she had given birth her last child. One year after the birth, at about 18 years ago, another IUD had beenwas inserted into the uterine cavity. She had no symptoms after this insertion, and she had no follow follow-up examinations thereafter. Her urinary complaints had been started two years ago, and she had many antibiotics therapies for urinary tract infections.

After the informed patient was optained, we did cystoscopy. The IUD with a calculus formation on one of its horizontal arms that was free from vesical wall was seen and it was not attached to the vesical wall (Figure 2). The bladder's inner surface had the appearence of bullous edema (Figure 3). Simultaneously, we performed histeroscopy to search the cause of postmenapausal bleeding. A piece of IUD was found within the uterine cavity at the isthmic level, and a full curretage was performed after histeroscopy (Figure 4). Then we performed suprapubic cystotomy and we removed the IUD with a calculus formation from the bladder. We preferred cystotomy because of the big size of the calculus. We carefully observed the IUD again and we noticed that the IUD had no defect. So we thought that the piece of IUD could be belong to the first one which was inserted 25 years ago. The patient was discharged from hospital on the postoperative third day without any complications. The histopathological examination of full curretage was reported as "atrophic endometrium".

FIGURE 1: Copper T intrauterine device with a hyperechogenic mass on one arm of it, located in the urinary bladder (by transvaginal ultrasonography).

DISCUSSION

The IUDs have been used for the contraception purpose for many years with a low complication rate. The most common frequent serious complication of this method is perforation of the uterus.[5] The incidence of uterine perforation ranges from 1 to 3 per 1000 insertions.[6] Intravesical migration is a rare complication and it is usually symptomatic, causing pelvic pain and irritative voiding symptoms. Mostly, the device causes calculus formation as seen in our patient. There are nearly approximately 50 reported cases in the literature with the migration of the IUD into the bladder with or without calculus formation. The interval between the insertion and removal of the device ranged from 6 month to 16 years. Usually the patients are diagnosed during their fertile ages. Our case's IUD was the latest removed device in the literature since it was diagnosed and removed after 18 years.

The clinical appearance of migrations may be insidious and therefore the condition may remain undiagnosed for several years. Once an IUD moved migrates into the bladder, it usually becomes encrusted with calculus. Patients may present with irritative voiding symptoms, recurrent urinary infections, hematuria, incontinence and a dull abdo-

FIGURE 2: Copper T intrauterine device with calculus formation located in the bladder seen through cystoscopy.

minal pain.[4] If the patients are not evaluated appropriately, they may have multiple antibiotic therapies. Similarly, the presenting symptoms of our case was were difficulty of micturition, burning and burning of micturition and urgency. However, postmenopausal bleeding is an unusual symptom and we also didhave not encountered any case with a piece of the IUD in the uterine cavity, during the in our literature search. We comment that the piece of the IUD made caused a foreign body reaction on on in the endometrium, so the patient had been prevented from the pregnancy.

The majority of the cases were diagnosed with radiographic findings and confirmed with cystoscopy. In our case, we demonstrated the IUD in the bladder with transvaginal ultrasonography. Mahmutyazıcıoğlu et al, suggested that transvaginal ultrasonography was not appropriate to detect the IUD that migrated to the bladder and, they recommended transabdominal ultrasonography for the bladder migrated IUD.[7] Also similarly, Özgür et al reported that ultrasonography had diagnostic limitations to diagnose.[8] But In spite of those, we demonstrated the device in the bladder perfectly, by transvaginal ultrasonography.

Migrated IUD in that migrated into the bladder should be removed. The treatment modality may be cystoscopy or suprapubic cystotomy, and the technique may be choosen according to change with the experience and the technical facilities of the surgeon.[9,10]

As a resultIn conclusion, our case is the latest removed device in the literature that migrated into the bladder reported in the literature. Also in addition to that, presenting symptom of the patient as postmenopausal bleeding is uncommon. Furthermore, we think that a remained piece of previously removed device in the uterine cavity acted as a foreign body so that the patient did not become pregnantand prevented pregnancy. In the first trimester of pregnancy, withe IUD must be removed remove ıt as soon as possible.[11] The presented case also emphasized emphasizes that if a woman had a history of unremoved IUD, she must be carefully evaluated for the migration of device to neighbouring organs.

FIGURE 3: Bullous edema on the bladder wall.

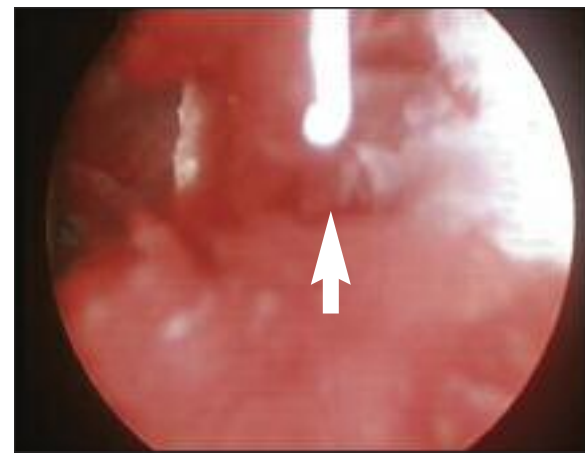

FIGURE 4: Piece of the intrauterine device seen through hysteroscopy.

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