Cukurova Medical Journal
ÇUKUROVA ÜNİVERSİTESİ TIP FAKÜLTESİ DERGİSİ

Cukurova Med J 2016;41(Suppl 1):107-109
DOI: 10.17826/cutf.254657

EDİTÖRE MEKTUP/LETTER TO THE EDITOR

Bladder stone formation due to an intrauterine device migrating to different localizations

Farklı lokalizasyonlara giden rahim içi araca bağlı mesane taşı oluşumu

Berat Cem Özgür[1], Cem Nedim Yücetürk[1], Haşmet Sarıcı[1], Muzaffer Eroğlu[1]

[1]Ankara Eğitim ve Araştırma Hastanesi Üroloji Kliniği, Ankara, Turkey

Cukurova Medical Journal 2016;41(Suppl 1):107-109.

Dear Editor,

Intrauterine devices (IUD) are one of the most commonly used methods for contraception. Although these devices are safe, some complications exist. One of these complications is the migration from the uterus with a reported incidence of less than 1/1000 IUD insertions[1]. Here we report a woman with the urinary manifestations started 14 years after IUD insertion. The present case is helpful to review to existing information and adds cogitation about a possible complication of these devices.

A 38 year old woman presented with dysuria, frequency and suprapubic pain for six months. She also complains about the difficulty in voiding. For more than one year, she had recurrent urinary tract infections. An intrauterine device has been placed in her 15 years ago and she had been pregnant twice after the insertion of that device without any contraceptive methods. It was learnt from the history that the insertion of the device was difficult and after insertion she had lower abdominal discomfort for a week. The type of the IUD placed in the patient is not known.

The first pregnancy was after one year the device has been placed in. It was told that the device might have been fallen by her gynecologist. On physical examination including the pelvic exam, no abnormality was detected. At two consecutive urinalysis hematuria (45 and 75 red blood cells per high-power field in consecutive centrifuged specimens) was detected. On her pelvic X-ray a radioopacity that suggests a bladder stone with a 3x2 cm size and a T shaped IUD on the suprapubic region was found. The IUD was not complete and a small part of it was missing. After a careful look, the missing part was seen along with the bladder stone (fig. 1). Abdominal ultrasound also reported the bladder stone. After hospitalization, cystoscopy was performed and the bladder stone was seen. After a succesfull cystolitotripsy the stone fragments were removed The small disjointed part of the IUD was found in the center of the stone and also removed from the bladder (fig. 2,3). There was not a different gross pathology in the bladder. After the stone and the piece of the IUD was removed there was not an area of perforation in the bladder visible on cystoscopy. The patient was discharged without any complication on the postoperative first day with the recommedations of gynecologic control because the main part of the IUD was located between bladder and uterus carrying a risk of fistula formation. It was soon learnt that the gynecologists removed the remainder of the IUD via surgery. Also her urinary symptoms resolved after the stone removal.

Bladder stones in young females are rare and when detected, detailed diagnostic work up should be performed evaluating a foreign body. Although it is a so rare condition, migration of the IUD should be in mind. In cases with the history of difficulty of insertion or removal of IUD, also with the anamnesis of pain or discomfort after these procedures care must be taken. Also if the uterine

Yazışma Adresi/Address for Correspondence: Dr. Berat Cem Özgür, Ankara Eğitim ve Araştırma Hastanesi Üroloji Kliniği Ankara, Turkey. E-mail: bcemozgur@hotmail.com
Geliş tarihi/Received: 16.03.2016 Kabul tarihi/Accepted: 07.06.2016

measurements are much different from the previous control of patient's (especially after a difficult removal of an old device), and if threads are not at routine follow up, further studies are required. In the literature there are reports of migration of IUD to different organs but there is not a report of migration of different parts to different localizations[2-4].

In the present case although the patient never voluntarily removed the IUD after the insertion she became pregnant twice and had gave birth to healthy babies at term. It was told that the device might have been fallen but no evaluation was performed. It was also learned that she had recurrent urinary tract infections for more than a year. In cases of haematuria or recurrent urinary tract infections and voiding symptoms, clinical evaluation must include the gynecolocical history including IUD insertion. In these cases radiologic imaging could be helpful. The main part of the device is neither in the uterus nor bladder. Only a small part of it was detected in the bladder that caused to develop bladder stone. The rest part of the IUD was detected as located between bladder and uterus and it carries a risk of formation of a vesicouterine fistula. She was therefore referred to gynecology clinic in order to remove the rest of the device.

Figure 1.

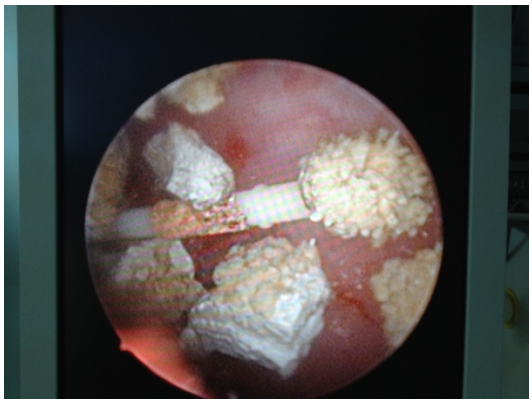

Figure 2.

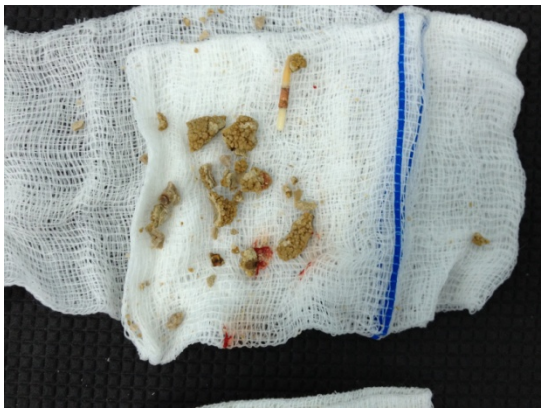

Figure 3.

Endoscopic procedures are easy and successful methods in intravesically migrated devices and the mostly the first treatment choice[5]. Iatrogenic uterine perforation, sudden involuntary uterine and bladder contractions, multiparity, history of abortus are reported as the reasons of such migrations[6].

In patients with bladder stones a foreign body must be in mind. Also if a suspect occurs for the inappropriate placing of IUD, migration of the device must also be considered. According to the World Health Organization migrated IUD should be removed regardless of its type and location. In the current case, as it is well known that a bladder stone is a surgical indication the small part that migrated and resulted stone formation has been removed by cystoscopic procedure. To our best of knowledge it is the first case of an IUD partially migrated to bladder and partially to a location between bladder and uterus. Management startegies are contraversial and individual but surgery is often

recommended to remove the migrated devices. The type of surgery varies due to the experience of the clinician.

REFERENCES

1. Kriplani Alka, Garg Pradeep, Sharma Meenakshi, Agarwal Nutan. Laparoscopic removal of extrauterine IUCD using fluoroscopy guidance: a case report. Journal of Gynaecologic Surgery. 2005;21:29-30.
2. Dietrick DD, Issa MM, Kabalin JN, Bassett JB. Intravesical migration of intrauterine device. J Urol. 1992;147:132–4.
3. El-Hefnawy AS, El-Nahas AR, Osman Y, Bazeed MA. Urinary complications of migrated intrauterine contraceptive device. Int Urogynecol J Pelvic Floor Dysfunct. 2008;19:241–5.
4. Markovitch O, Klein Z, Gidoni Y, Holzinger M, Beyth Y. Extrauterine mislocated IUD: is surgical removal mandatory? Contraception. 2002;66:105-8.
5. Atakan H, Kaplan M, Erturk E. Intravesical migration of intrauterine device resulting in stone formation. Urology. 2002;60:911.
6. Shin DG, Kim TN, Lee W. Intrauterine device embedded into the bladder wall with stone formation: laparoscopic removal is a minimally invasive alternative to open surgery Int Urogynecol J. 2012;23:1129-31.