Scholars Journal of Medical Case Reports
Abbreviated Key Title: Sch J Med Case Rep
ISSN 2347-9507 (Print) | ISSN 2347-6559 (Online)
Journal homepage: https://saspublishers.com

OPEN ACCESS

Urology

Intravesical Migration of An Intrauterine Device: A Case Report

Mohammed Benamar[1*], Khalid Ouatar[1], Mohammed Karam Saoud[2], Mustapha Ahsaini[1], Soufiane Mellas[1], Mohammed Fadl Tazi[1], Jalal Eddine El Ammari[1], Mohammed Jamal El Fassi[1], Moulay Hassan Farih[1]

[1]Urology Department, Chu Hassan II Fes, Morocco
[2]Gynecology Department, Chu Hassan II Fes, Morocco

DOI: 10.36347/sjmcr.2024.v12i03.006 | **Received:** 17.01.2023 | **Accepted:** 25.02.2024 | **Published:** 11.03.2024

***Corresponding author:** Mohammed Benamar
Urology Department, Chu Hassan II Fes, Morocco

Abstract | **Case Report**

Intravesical migration of an intrauterine device (IUD) is an uncommon complication. We report here a case of IUD migration into the bladder in a 41-year-old patient who had been wearing an IUD for 3 years and who initially consulted us because of urinary burning and pollakiuria associated with episodes of haematuria. The diagnosis of intra-vesical migration was made by ultrasound and confirmed by cystoscopy. Endoscopic extraction of the IUD was performed successfully. Post-operative management was straightforward.

Keywords: Intrauterine device, migration, bladder, ultrasound, cystoscopy.

INTRODUCTION

Intravesical IUD migration is not an exceptional complication. Its incidence is estimated in the literature at between 1/10,000 and 1/350 [1, 2]. This migration most often occurs into the abdominal cavity, more rarely into the pelvis. In the latter case, it is the bladder that is most frequently affected. The most frequent complication is the formation of a calculus on the coil [3]; more rarely, the patient may present with a vesico-uterine fistula [4] or acute pyelonephritis [5]. Treatment methods depend on the location of the IUD.

OBSERVATION

We report the case of a 41-year-old female patient who initially consulted us for signs of the lower urinary tract consisting of mictional burning and pollakiuria associated with episodes of haematuria in a patient with no particular notable history. Pelvic ultrasound (Figure 1) and cystoscopy (Figure 2) confirmed the total intravesical location of the IUD, since the 2 branches of the T were visible. A methylene blue test ruled out a vesico uterine fistula. The patient had undergone endoscopic extraction of the IUD using the cystoscope and foreign body forceps (Figure 3).

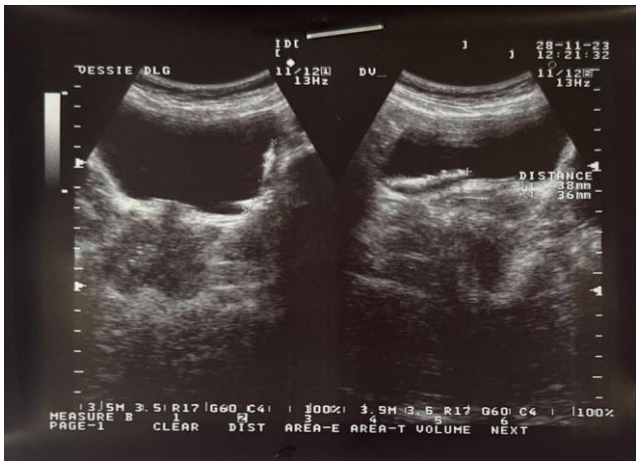

Figure 1: Ultrasound image showing the intravesical coil

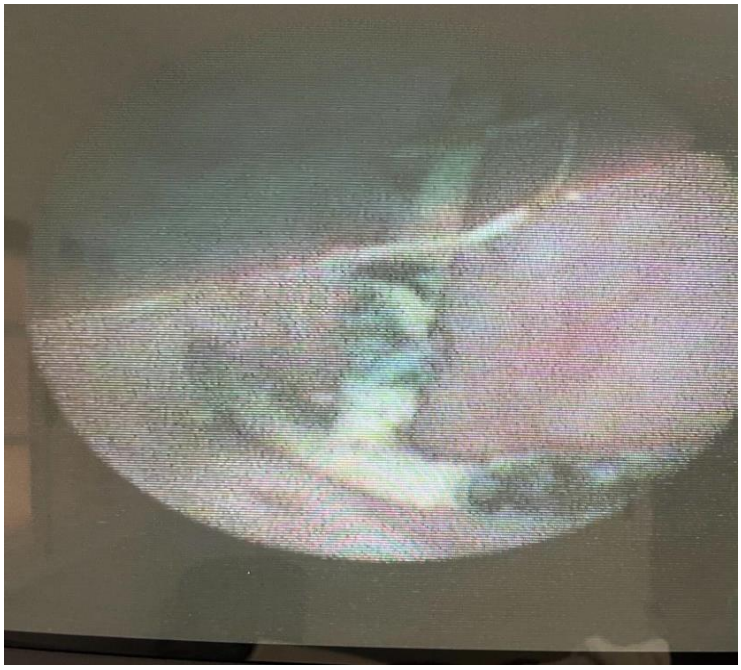

Figure 2: Endoscopic view by cystoscopy showing the intravesical coil

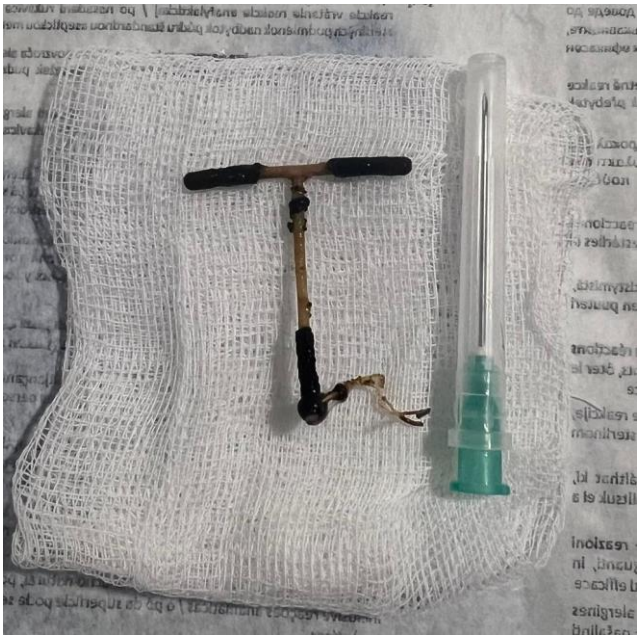

Figure 3: Image of the coil after extraction

DISCUSSION

The IUD is one method of contraception. Like any foreign body, it is often associated with significant complications, especially trans-uterine migration. The physio-pathological explanation for the contraceptive action of the IUD is linked to the endometrial inflammation caused by this foreign body, which prevents implantation [6]. Trans-uterine migration of IUDs that have been neglected for years [7] may take several directions, locating either in the abdomen [7] or in the bladder [8], as in the case of our patient, or in the extra-vesical pelvic space [7]. The consequences of intravesical IUD migration are variable. The most frequent possibility is the formation of a stone on the IUD [9, 10]. The symptomatology is often urinary, with pollakiuria, urinary burning and dysuria of varying degrees of disability, which is often considered to be trivial cystitis and treated as such. Terminal haematuria may sometimes be associated with this urinary symptomatology, as in the case of our patient who consulted us for urinary burning and pollakiuria associated with episodes of haematuria. Sometimes intravesical migration is completely asymptomatic and the diagnosis is made by chance during a radiological examination for another reason [11]. The diagnosis is often evoked by ultrasound and confirmed by cystoscopy. AUSP can show the IUD with its metallic tone embedded in a calcium-toned opacity if the IUD is

embedded in a calculus. Cystoscopy remains the most reliable diagnostic method. The IUD can be removed either endoscopically [12], as in our patient's case, or by bladder pruning. In the case of partial perforation of the bladder wall, laparoscopic extraction may be indicated. The outcome is often favourable.

CONCLUSION

Intravesical migration of the IUD is not an exceptional complication. It is often the result of poor monitoring of this contraceptive method. In some cases, it can lead to the formation of a calculus around the IUD. The IUD is usually removed endoscopically, and the outcome is often favourable.

BIBLIOGRAPHY

1. Lansac, J., Lecomte, P., & Marret, H. Gynécologie pour le pratricien 6ème edition, 29, 239.
2. Haouas, N., Sahraoui, W., Youssef, A., Thabet, I., & Mosbah, A. T. (2006). Migration intra-vésicale de dispositif intra-utérin compliquée de lithiase. *Journal de gynécologie obstétrique et biologie de la reproduction*, *35*(3), 288-292.
3. Ceccato, V., Boileau, A., Roblin, M., Tariel, D., Bon, D., & Estrade, V. (2007). Migration intravésicale d'un dispositif intra-utérin. Stratégies d'exploration et modalités thérapeutiques. *Progrès en Urologie*, *17*(2), 256-259.
4. Schwartzwald, D., Mooppan, U. M., Leon Tancer, M., Gomez-Leon, G., & Kim, H. (1986). Vesicouterine fistula with menouria: a complication from an intrauterine contraceptive device. *The Journal of urology*, *136*(5), 1066-1067.
5. McNamara, M., Kennan, N., & Buckley, A. R. (1985). Copper-7 perforation of the uterus and urinary bladder with calculus formation—sonographic demonstration. *The British journal of radiology*, *58*(690), 558-559.
6. Bacha, K., Ben Amna, M., Ben Hassine, L., Ghaddab, S., & Ayed, M. (2001). Dispositif intra-utérin migré dans la vessie. *Progrès en urologie (Paris)*, *11*(6), 1289-1291.
7. Chang, C. H., Chou, C. Y., Lee, W. I., Tzeng, C. C., & Liu, C. H. (1992). Pelvic actinomycosis with colo-ileo-vesical fistula formation: report of a case. *Journal of the Formosan Medical Association= Taiwan yi zhi*, *91*(3), 342-345.
8. Derevianko, I. M., Derevianko, T. I., & Ryzhkov, V. V. (1997). The urological complications of contraception using intrauterine coils. *Urologiia i Nefrologiia*, (5), 27-30.
9. Maskey, C. P., Rahman, M., Sigdar, T. K., & Johnsen, R. (1997). Vesical calculus around an intra-uterine contraceptive device. *British journal of urology*, *79*(4), 654-655.
10. Nouri, M., Fassi, M., Koutani, A., Attya, I., Hachimi, M., & Lakrissa, A. (1999). Migration of an intrauterine device into the bladder. Report of a case. *Journal de Gynécologie, Obstétrique et Biologie de la Reproduction*, *28*(2), 162-164.
11. Caspi, B., Rabinerson, D., Appelman, Z., & Kaplan, B. (1996). Penetration of the bladder by a perforating intrauterine contraceptive device: a sonographic diagnosis. *Ultrasound in Obstetrics and Gynecology: The Official Journal of the International Society of Ultrasound in Obstetrics and Gynecology*, *7*(6), 458-460.
12. Yalçın, V., Demirkesen, O., Alıcı, B., Önol, B., & Solok, V. (1999). An unusual presentation of a foreign body in the urinary bladder: a migrant intrauterine device. *Urologia internationalis*, *61*(4), 240-242.