

Marcelo Esteves Chaves Campos¹; Felipe Cardoso Lopes²; Gabriella De Araújo Cabanillas Dávila³; Giovanna Luiza Cunha Faria³

¹Professor de faculdade de Medicina de UFMG e UNIFENAS BH

²Urologista - Biocor Instituto

³Acadêmico de Medicina da Universidade José do Rosário Vellano - UNIFENAS, Campus Universitário de Belo Horizonte.

Introdução e Objetivo

Intrauterine devices (IUCDs) represent a widely adopted and remarkably effective long-term contraceptive solution. These devices, made in a small T-shaped design from flexible plastic or metal, are gently inserted into the uterus by trained healthcare professionals. Although they have a high rate of safety and reliability, it is important to acknowledge that employing such devices is not devoid of potential complications. This device can encompass a spectrum of issues, ranging from discomfort, pain, and irregular bleeding to more serious concerns such as perforations and infections.

In the literature review, as well as in the articles referenced to guide this study, a noteworthy observation emerged. Among the documented complications associated with this method, the migration of an intrauterine device into adjacent organs emerges as one of the most critical and concerning occurrences.

The aims of this study were to describe our experience with a rare cases of intrauterine contraceptive device (IUCD) migration to the bladder and to systematically review the literature

Método

We report two clinical cases of patients aged 30 and 33 years old, presenting with chronic urinary symptoms and recurrent urinary tract infections. Abdominal ultrasounds revealed a hyperechoic lesions in the bladders. Both patients had undergone IUCD insertion 10 years ago. A cystoscopy was performed in each case, revealing a vesical stone fixed to the top of the bladder wall, caused by the intravesical migration of the IUCD. No vesicovaginal fistula formation was observed. In these cases, the IUDs with secondary calculus formation were successfully removed by cystoscopy without complications, and there was no damage to the bladder walls. Therefore, we designed a systematic review of the literature, using a search strategy with the medical subject heading terms "intrauterine device migration" AND "urinary tract" on the PubMed/Medline database. We also searched the references of the included papers. Studies were included regardless of language or publication type.

Figuras



Figure 1:
abdominal
ultrasound



Figure 2: stone on
the top of bladder
wall



Figure 3: Without
vesicovaginal
fistula formation



Figure 4: IUCD
after its removal

Resultados

In these cases, the IUCD with secondary calculus formation was successfully removed by cystoscopy without complications, and there was no damage to the bladder wall. We screened 92 manuscripts and selected 77, detailing 113 other patients with an intravesical migrated intrauterine device for inclusion, of which 88 cases were included. The mean age of reported cases was 34 years (range: 20-74). More than half (65.91% or 58/88) of the included patients were diagnosed with stone formation, and their missing IUCD was incidentally discovered. Almost half (48.87% or 23/88) of the patients presented with urinary tract infection. Other symptoms observed included suprapubic pain in 47.73% (42/88) of patients, dyspareunia in 4.55% (4/88), and one patient with neoplasia. Over a third (32.95% or 29/88) of the patients were diagnosed as a result of pregnancy. In 61.25% (49/80) of the patients, endoscopic surgery was attempted. The majority of the patients became completely asymptomatic after the treatment.

Conclusão

Although rare, urologists should suspect of a migrated IUCD in patients with unexplained lower urinary tract symptoms and a past history of insertion of this contraceptive method. The results of this systematic review support the surgical removal of the device as a definite treatment. In our experience the cystoscopic removal should be considered as a safe and effective approach to manage an intravesical migrated IUCD.

Referências

- BASIRI, Abbas, SHAKIBA Behnam, ROSTAMINEJAD Niloufar. Removal of intramural trapped intrauterine device by cystoscopic incision of bladder wall. *Int Braz J Urol.*; 45(2):408-409. abr 2019. Disponível em <<https://www.scielo.br/ijbju/a/L4Tmmtc8YfBnt8PpsKLRKxr/?format=pdf&lang=en>> Acesso em 20/05/2023.
- SANO, Masayuki, NEMOTO, Kaoru, MIURA, Takafumi, SUZUKI, Yasutomo. Endoscopic Treatment of Intrauterine Device Migration into the Bladder with Stone Formation. *J Endourol Case Rep.* Kamagari; 3(1):105-107. 2017. Disponível em <<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5628558/pdf/cren.2017.0038.pdf>> Acesso em 20/05/2023.