International Journal of Clinical Obstetrics and Gynaecology

ISSN (P): 2522-6614
ISSN (E): 2522-6622

www.gynaecologyjournal.com
2020; 4(2): 29-31
Received: 17-01-2020
Accepted: 19-02-2020

Dr. Ritu Sinha
Consultant, Department of Obstrectic & Gynaecology Dwarka Hospital, Prayagraj, Uttar Pradesh, India

Dr. Santosh Kumar Singh
Consultant, Department of General Surgery, Dwarka Hospital, Prayagraj, Uttar Pradesh, India

Corresponding Author:
Dr. Santosh Kumar Singh
Consultant, Department of General Surgery, Dwarka Hospital, Prayagraj, Uttar Pradesh, India

Migrated intrauterine contraceptive device into urinary bladder and peritoneal cavity: A friend turned foe if forgotten

Dr. Ritu Sinha and Dr. Santosh Kumar Singh

DOI: https://doi.org/10.33545/gynae.2020.v4.i2a.500

Abstract
Objective: Detecting the cause and management of intraperitoneal migration of IUD.
Summary of Background Data: A 52-year-old female gravida 9, para 9, alive 9, post hysterectomy, presented to the outpatient department for abdominal pain and was operated for migrated IUD through urinary bladder to intra-peritoneum.
Material and Method: Careful and elaborated history was taken. X-ray KUB, USG whole abdomen with pelvis, CT scan whole abdomen with pelvis done. Exploratomy laparotomy was done and a foreign body (IUD) was retrieved.
Result: Removal of intraperitoneal IUD after 12 years.
Conclusion: The uterus contracted during puerperium, which accelerated the perforation of the uterus and displacement of the IUD. Efforts should be made to avoid IUD migration. After IUD insertion, a regular examination to ensure its proper position is necessary and important.

Keywords: Intrauterine device, migrated IUD, intra-abdominal IUD

Introduction
Intrauterine devices (IUDs) are one of the most reliable and widely accepted reversible contraception methods throughout the world [1]. IUDs possess many advantages, such as safety, convenience, painless to insert, and low cost [2]. They do have the risk of complications, which includes septic abortion, ectopic pregnancy, pelvic inflammation, bleeding and uterine perforation. Perforation, though relatively rare, can lead to serious complication including IUD migration to various sites. Displaced IUD can lead to contraception failure, pelvic and abdominal inflammation disease, bowel perforation and obstruction, serious morbidities associated with peritoneal and omental adhesion, volvulus, and urethrocutaneous fistula [3, 4, 5]. Uterine perforation during the insertion is an uncommon complication of IUCD and its incidence range from 0 to 1.6/1000 insertion [6]. Once the IUCD has penetrated the bladder, it usually becomes encrusted with calculi and associated with lower urinary tract symptoms [15]. In this report, we detailed a case in which the perforated IUD migrated to the bladder and did not attract the patient's attention sufficiently, with sonographic and radiographic findings.

Case Report
A 52 year old female gravida 9, para 9, alive 9, presented to the surgery outpatient department with on and off suprapubic pain and dysuria since 2 years. She took treatment for the UTI but her symptoms were persistent and progressive. On retrospective questioning, she gave history of insertion of IUCD 12 years back after the delivery of her youngest child. She underwent hysterectomy for her uterine prolapse 6 years back. No IUCD was noticed in post-hysterectomy uterus, and was thought of spontaneous expulsion without the knowledge of the patient. She underwent ultrasonography of pelvis and whole abdomen to assess the cause of suprapubic pain, which revealed a large echogenic shadow, 2.8 cm, in lumen of Urinary bladder with posterior dense acoustic shadow -s/o calculi with lateral bladder wall perforation and communication with adjacent bowel loop with cystitis, with absent uterus (post-hysterectomy) and normal ovaries.
Further X-ray KUB was done, which revealed an intrapelvic? intravesical IUCD with calcified arm (fig – 1).

CT pelvis was followed, which revealed a large calcified foreign body with two linear hyperdense shadows arising from it, traversing through the bladder wall and communicating to the lumen of adjacent adhered bowel loop [fig- 2].

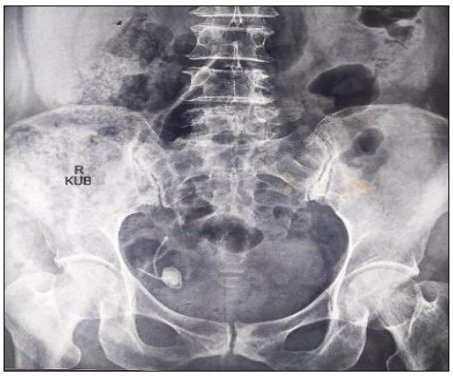

Fig 1: Intravesical IUCD with calcified arm

Patient was prepared for surgery after an informed, written consent and was subjected to exploratory laparotomy with lower midline incision which revealed ileal loop adhered to the urinary bladder with no ileo-vesical fistula. Adhesiolysis followed by cystostomy was done.

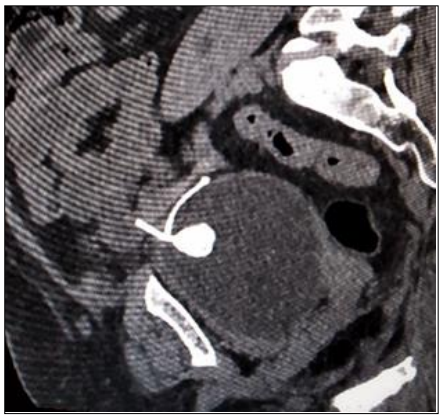

Fig 2: CT pelvis showing calcified arm of IUCD with other arm communicating to the adjacent ileal serosa

A T-shaped device encrusted with stone of size 3.0 × 2.0 cm was extracted from the urinary bladder (fig 3 & 4). The bladder was closed primarily and patient made an uneventful recovery. On fracturing the stone, both the arms of the copper-T along with the thread could be identified. Postoperative period was uneventful and the patient was discharged in a satisfactory condition.

Fig 3: Cystolithotomy showing T-shaped device encrusted with stone

Fig 4: T-shaped device encrusted with stone of size 3.0 × 2.0 cm

Discussion

The uterine perforation is an uncommon complication of IUD insertion, incidence being 1.6/1000 insertions [6]. Many factors determine the occurrence of uterine perforation, such as - the IUD type, insertion skills, and insertion time [11]. Furthermore, uterine contraction can accelerate perforation of the uterus and the migration of IUD. Though perforated IUD can cause potentially serious complication, it is uncommon that it can often be asymptomatic. In this case, the patient experienced IUD displacement and suffered from suprapubic pain and dysuria. Ultrasonography confirmed the IUD migration. The uterus contracted during puerperium, which accelerated the perforation of the uterus and displacement of the IUD.

Many perforated IUDs do not induce clinical symptoms in a short time, they can lead to the adhesion of nearby tissues, chronic abdominal and pelvic inflammation, the perforation of other organs, and obstruction of intestines [12, 13]. In the present study, the perforated IUD migrated to the bladder and started perforating lateral wall of bladder to adhere to wall of ileum. Although the perforated bladder healed without any treatment, chronic urinary symptoms persisted for a long time. These symptoms were absolutely caused by the migrated IUD, but the specific reason is still unclear.

Ultrasonography [3, 14, 15] and plain radiography scan analysis are effective and commonly used techniques. Through Ultrasonography, we could examine the position of an IUD and integrity of the uterus. Plain radiography can clearly describe whether an IUD exists in the body, but exact localisation is difficult. Combining various modalities of investigation to provide an accurate diagnosis is important. In our case, based on the ultrasonography, plain radiography, computed tomography, and clinical history, an accurate diagnosis was made.

Conclusion

Uterine perforation by IUD and migration, though uncommon but a recognised complication, hence needs proper assessment and counselling prior to insertion. This patient experienced IUD displacement and suffered from suprapubic pain and dysuria. Ultrasonography confirmed the IUD migration. The uterus contracted during puerperium, which accelerated the perforation of the uterus and displacement of the IUD. More efforts should be made to avoid IUD migration. After IUD insertion, a regular examination to ensure its proper position is necessary and important. Our study demonstrated that a missing IUD should be noticed and immediately removed to avoid further complications.

References

1. Kandirali E, Topcuoglu M, Semercioz A. Double intrautein device presented with protruding urethral stone. Marmara Med J. 2008; 1:61-3. [Google Scholar]
2. Wildemeersch D, Goldstuck ND, Hasskamp T. Current status of frameless anchored IUD for immediate intracesarean insertion. Dev Period Med. 2016; 20:7-15. Cited Here...

3. Koo HR, Oh YT, Kim YT. Intrauterine device found in an ovarian carcinoma. J Comput Assist Tomogr. 2008; 32:69–71. Cited Here... |View Full Text | PubMed | CrossRef
4. Sinha M, Gupta R, Tiwari A. Minimally invasive surgical approach to retrieve migrated intrauterine contraceptive device. Int J Reprod Contracept Obstet Gynecol. 2013; 2:147-51. [Google Scholar].
5. Inceboz US, Ozcakir HT, Uyar Y. Migration of an intrauterine contraceptive device to the sigmoid colon: a case report. Eur J Contracept Reprod Health Care. 2003; 8:229-32. [PubMed] [Google Scholar].
6. Sataa S, Sami BR, Sabeur R, Karim C, Ali H. Bladder calculus resulting from the migration of an intrauterine contraceptive device: A report of ten cases. Int J Nephrol Urol. 2011; 3:54-61.
7. Dietrick DD, Issa MM, Kabalin JN, Bassett JB. Intravesical migration of intrauterine device. J Urol. 1992; 147:132-4.
8. Ghanem MA, Sultan SM, Ghanem AA, Zantay FM. Double Intravesical Migration of Intrauterine Device: Presented with Vesical Stone Formation.
9. Gillis E, Chhiv N, Kang S, Sayegh R, Lotfipour S. Case of urethral foreign body: IUD perforation of the bladder with calculus formation. Cal J Emerg Med. 2006; 7:47-53.
10. Ozgür A, Sismanoglu A, Yazici C, Cosar E, Tezen D, Ilker Y *et al*. Intravesical stone formation on intrauterine contraceptive device. Int Urol Nephrol. 2004; 36:345-8.
11. El-Diasty TA, Shokeir AA, el-Gharib MS. Bladder stone: a complication of intravesical migration of Lippes loop. Scand J Urol Nephrol. 1993; 27:279–80. Cited Here... |PubMed | Cross Ref.
12. Matthews LR, O'Dwyer L, O'Neill E. Intrauterine device insertion failure after misoprostol administration: a systematic review. Obstet Gynecol. 2016; 128:1084-91. Cited Here... |View Full Text | PubMed | CrossRef
13. Kant S, Archana S, Singh AK. Acceptance rate, probability of follow-up, and expulsion of postpartum intrauterine contraceptive device offered at two primary health centers, North India. J Family Med Prim Care. 2016; 5:770-6. Cited Here...
14. Sirikci A, Sarica K, Bayram M. Ureteral displacement due to a migrated intrauterine contraceptive device. Urol Int. 2000; 65:179-80. Cited Here... |PubMed | CrossRef
15. Mbarki C, Ben Abdelaziz A, Sahnoun Rl. Pelvic actinomycosis: diagnostic and therapeutic aspects. Gynecol Obstet Fertil. 2016; 44:168-74. Cited Here. |PubMed | Cross Ref.