

Unusual Placement of an IUD; Presenting as Vesicle Calculus: A Case Report

Santosh K. Singh¹, Devendra S. Pawar^{1*}, Jyotsana Sen², Sachit Sharma¹

¹Department of Urology, Pt B D. Sharma University of Health Sciences, Rohtak, India

²Department of Radiodiagnosis, Pt B D. Sharma University of Health Sciences, Rohtak, India

Abstract

Background and Aims: Intrauterine Contraceptive Devices (IUD) have been commonly used method for birth spacing in Asian countries. In the rural areas of India infrequently these IUDs are placed by trained multipurpose health workers. We report a 30 years-old women with erroneously placed IUD, transurethrally into urinary bladder which later on presented as vesicle calculus and it was removed endoscopically. To our knowledge for presenting this misplacement, no such cases have been reported earlier in scientific literature.

Keywords: Endoscopic, Intrauterine Contraceptive Device, Vesicle Calculus, Erroneous Placement

Introduction

Intrauterine Contraceptive Devices (IUD) have been commonly used method of birth spacing in Asian countries (1). In remote rural area of India infrequency these IUDs are placed by trained multipurpose health workers (paramedics). IUDs migrating from the uterus have been reported by several authors (1-3). To our knowledge for presenting this mismanagement no such case of primary erroneously placement of IUD into bladder has been reported. We report a case of copper-T that was erroneously placed transurethrally into urinary bladder which later on presented as vesicle calculus; it was removed endoscopically.

Case Report

A 30 yrs old women presented to the outpatient department of urology at our institution for complains of dysuria, recurrent urinary tract infection for one year duration. She had undergone a full term normal delivery two months back. The urine analysis

revealed presence of 15-20 RBC/hpf and 20-30 pus cells/hpf. The urine culture and sensitivity revealed E.Coli sensitive to cefixime. Antibiotics were started and to evaluate the cause of recurrent UTI, ultrasonography and skiagram KUB region was done (Fig 1). This revealed a vesicle calculus over a Cu-T nidus. Lower abdomen CT-Scan was done to see any extravescical extension because mostly IUD is migratory from uterus. No extravescicle extension was seen (Fig 2). Detailed retrospective questionnaire revealed that an IUD (intrauterine device Cu-T) was inserted one year back, four months after the first delivery by a local multipurpose health worker at her village. During the insertion she had severe pain; hematuria and burning micturation. Thereafter it subsided within fifteen days with symptomatic treatment. She

**Correspondence:*

Devendra S. Pawar, MD

8-L; Model Town, Rohtak, India, Pin Code-124001

Tel: +91-9315360943

E-mail: pawar.devendra@rediffmail.com

Received: 3 May 2009

Revised: 12 Jun 2009

Accepted: 15 Jun 2009



Figure 1. Skiagram pelvis-A vesicle calculus with iud(Cu-T)

was not referred to any qualified doctor at that time. One month after the insertion of IUD, she missed her period; urine was test positive for pregnancy. An ultrasound was done only once at twelve weeks of gestation by a local practitioner. However, no efforts

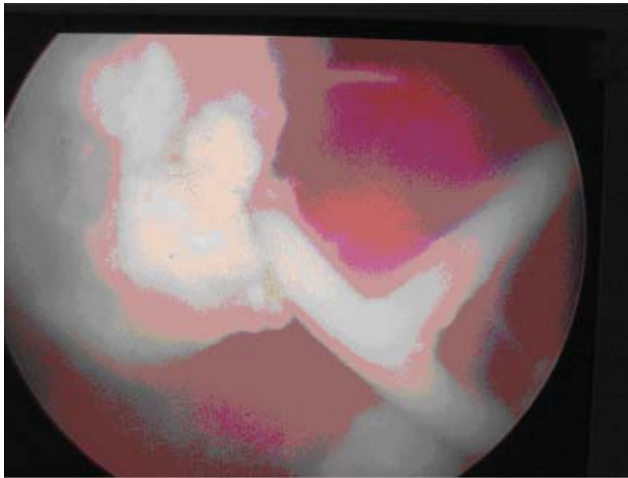


Figure 3. Endoscopic view of IUD and calculus

were made to locate for missing IUD. She was told that Cu-T might have been passed spontaneously. Due to this history and evaluation, it was concluded that IUD was erroneously placed transurethrally into urinary bladder at the time of insertion by a nonmedical health worker who did not differentiate between vagina, cervix and urethra. After the diagnosis, cystoscopy was done under anesthesia, vesicle



Figure 2. CT.scan pelvis-t shaped calculi in ub,no extravescicle extensionw

calculi were fragmented endoscopically (Fig 3) with pneumatic lithoclast (Fig 4). All fragments along with intact Cu-T were removed transurethrally (Fig 5). Postoperative period was uneventful. At present she is asymptomatic and discharged.

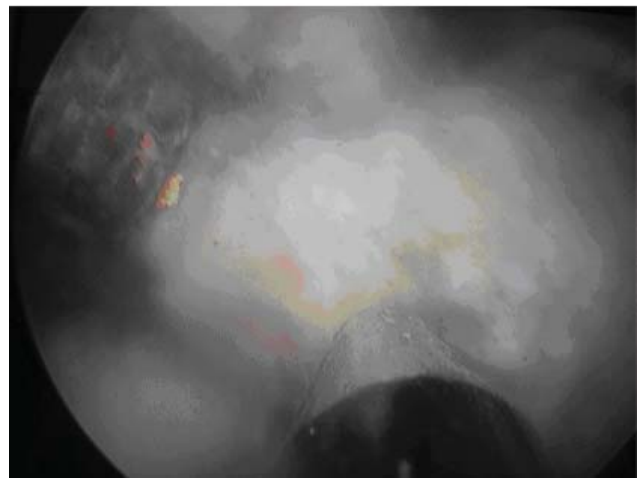


Figure 4. Endoscopic view of pneumatic lithotripsy

Discussion

Intrauterine contraceptive device is the most popular method of reversible contraception in developing countries due to its efficiency and low cost. However, this device is often inserted by paramedics of variable skills, and follow-up evaluations are



Figure 5. An endoscopically completely extracted erroneously placed cu-t

irregular or absent which can be the source of major complications (1). The serious complications such as bleeding, perforation and migration to adjacent structures have been reported by several authors. In almost all the cases intravesical presence of foreign body was due to accident, deliberate introduction or migration from adjacent organs (2). To our knowledge for presenting this mismanagement no such case of primary erroneously placement of IUD in to bladder has been reported. Misplaced intrauterine contraceptive device (IUD) may present with pregnancy or lost strings or may remain asymptomatic for years. In one series of 324 cases with misplaced IUD, 258 (79.9%) cases copper-T was found in the uterine cavity and in 47 cases (14.5%) it was removed from cervical canal. In only 18 cases (5.6%), it was translocated and of these 66.7% were inserted at primary health centers (3). A regular follow up of IUDs for visible threads would help in earlier detection of misplaced IUDs. Proper training of paramedical staff is mandatory in developing countries to provide safe and better family planning services. In our clinical practice we come across many foreign bodies of different kinds, inserted in urinary bladder. Foreign bodies may find their way into the bladder by accident, deliberate introduction through the urethra or migration from the neighboring organs. Due to embarrassment,

ignorance patients tend to seek treatment late, often waiting until the problem becomes symptomatic. Usually the patients present with urethritis, cystitis, recurrent UTI, or hematuria (4-5). X-ray and USG are sufficient to diagnose. Cystoscopic removal is ideal management of the bladder foreign bodies. When a stone has formed, it should be fragmented by litholapaxy or intracorporeal lithotripsy together with the removal of the foreign bodies. Large foreign bodies may be removed by suprapubic cystotomy where endoscopic removal is not possible.

Conclusions

The importance of IUD insertion by a trained doctor, post-insertion follow up, patient education and the need for awareness of the migration or erroneous placement of IUD including calculus formation cannot be overemphasized. And such complications can be managed endoscopically very well.

Acknowledgments

I am highly thankful to my teacher, my wife and kids, paramedical staff and above all to God who have helped me a lot in preparation of this manuscript.

Conflict of Interest

None declared.

References

1. Noura Y, Rakrouki S, Gargouri M, Fitouri Z, Horchani A. Intravesical migration of an intrauterine contraceptive device complicated by bladder stone: a report of six cases. *Int Urogynecol J Pelvic Floor Dysfunct.* 2007 May;18(5):575-8.
2. Pal DK, Bag AK. Intravesical wire as foreign body in urinary bladder. *Int Braz J Urol.* 2005 Sep-Oct;31(5):472-4.
3. Barsaul M, Sharma N, Sangwan K. 324 cases of misplaced IUCD—A5-year study. *Trop Doct.* 2003;33:11-2.
4. Eckford SD, Persad RA, Brewster SF, Gingell JC. Intravesical foreign bodies: five-year review. *Br J Urol.* 1992

Jan;69(1):41-5.

5. Bora Kupeli, Kenan Isen, Nuri Deniz, et al. An

unusual foreign body in the bladder. Gazi Medical Journal
1998;9:181-2.