

Intrauterine Device (IUD) In Bladder Stone

B Shetty, M V

Citation

B Shetty, M V. *Intrauterine Device (IUD) In Bladder Stone*. The Internet Journal of Surgery. 2010 Volume 27 Number 1.

Abstract

Perforation of uterus is a well known complication of IUD especially during puerperal insertion of IUD. The following is a rare case wherein IUD had also perforated the bladder and a secondary bladder stone was formed. There was also a pelvic mass formed by bowel, bladder and uterus.

INTRODUCTION

Perforation is a known complication of IUD insertion with an incidence of 1.3 per 1000 insertions.^[1,2] We are reporting a rare case where the device had perforated both uterus and bladder with stone formation around the bladder.

CASE REPORT

A 26-year-old female patient from a rural area presented with chronic abdominal pain since 2 years. The pain was located over the whole lower abdomen, coming on and off, relieved by medication. She also had on-and-off vomiting and pain during micturition since 6 months once in 2-3 weeks. Past history was insignificant. She had a history of IUD insertion 2 years back after her second child.

Vitals were stable. Examination of abdomen showed mild distension in the lower abdomen, with exaggerated bowel sounds. Clinical suspicion of subacute intestinal obstruction was made and the patient was investigated.

Erect x-ray showed few air-fluid levels in the RIF and epigastrium and a radioopaque structure was noted in the pelvis. USG of the abdomen revealed a bladder stone of 6 x 5cm with extension of an IUD-like structure into the posterior wall. Gynaecological opinion revealed absence of tail of IUD. CT of the abdomen and pelvis revealed a complex mass in the pelvis consisting of small bowel, large bowel, bladder and uterus.

Laparotomy was planned. Exploration revealed a mass consisting of ileum, sigmoid and omentum covering the pelvis, with narrowing of ileal lumen by adhesion. These adhesions were freed meticulously and the pelvis was reached. An IUD coming out of the uterus and entering the bladder was noted. The bladder was opened to see a stone

with the IUD embedded inside it. The stone with the IUD was removed (figure 1). The bladder wall was sutured. Hemostasis was achieved, drains were inserted and the wounds were sutured.

Figure 1

Figure 1: Bladder stone formed over IUD



The postoperative period was uneventful. The patient was kept on "nil orally" for 2 days, after which a liquid diet was started. A regular diet was started gradually over the next few days. Antibiotics were given parenterally for 5 days and orally for another 5 days. The patient was discharged after one week.

DISCUSSION

Perforation is a rare known complication of IUD insertion. Its incidence ranges up to 1.3 per 1000 insertions [1,2]. The chance of perforation is highest in case of puerperal insertion when the wall of the uterus is soft. This perforation may be partial or complete. Partial perforation may be within the

uterus or partially outside the uterus. Complete perforation may lead to other complications like adhesions, pelvic abscess and others [3]. Treatment depends on the type. If perforation is suspected during insertion, removal of IUD will suffice [4]. Complete perforation through the wall of the uterus may require laparoscopic removal or laparotomy by an expert. Few cases of IUDs in the bladder with stone formation were reported [5,6,7]. The common symptoms seen in these reports include pelvic pain, dysuria, and hematuria. IUDs in the bladder can be removed by either cystoscopy or suprapubic cystotomy [5,6,7].

References

1. Cole LP, Potts DM, Aranda C, Behlilovic B, Etman S, Moreni J, and Randic, L: An evaluation of the TCU 380Ag and the Multiload Cu375. *Fertility and Sterility*; 1985; 43(2): 214-217.
2. Edelman DA, Berger GS, and Keith LG: *Intrauterine devices and their complications*. Boston, G.K. Hall, 1979; p.263.
3. McIntosh N, Kinzie B, and Blouse A, eds.: *IUD guidelines for family planning service programs: A problem-solving reference manual*. 2nd ed. Baltimore, Johns Hopkins Program for International Education in Reproductive Health, 1993.
4. Diaz J, Pinto Neto AM, Bahamondes L, Diaz M, Arce XE, and Castro S: Performance of the Copper T 200 in parous adolescents: Are copper IUDs suitable for these women? *Contraception*; 1993; 48(1): 23-28.
5. 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.
6. Rajaie Esfahani M, Abdar A: Unusual migration of intrauterine device into bladder and calculus formation. *Urol*; 2007; 4: 49-51.
7. Singh I: Intravesical Cu-T emigration: an atypical and infrequent cause of vesical calculus. *Int Urol Nephrol*; 2007; 39: 457-9.

Author Information

B Rajeeva Shetty, M.B.B.S, M.S.(Gen. Surgery)
The Dean, ESI-PGIMSR

Murthy Kumar V, M.B.B.S, M.S.(Gen. Surgery)
Assistant Professor, Dept. of General Surgery, Saphthagiri Institute of Medical Sciences