



RESEARCH ARTICLE

RECTO-VESICAL FISTULA: A RARE COMPLICATION OF INTRA UTERINE
CONTRACEPTIVE DEVICE- A CASE REPORT

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ABSTRACT

Intrauterine contraceptive device (IUCD) is a very cheap and commonly used method of contraception, but it is not without complications. Migration of the device is the most serious and morbid of them all. In this report, we present a very rare case where the device had migrated outside the uterus and caused recto-vesical fistula. The case was successfully managed endoscopically.

Key words:

Intrauterine contraceptive device (IUCD),
Copper-T migration,
Recto-vesical fistula.

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INTRODUCTION

Copper T is the most commonly used intrauterine contraceptive device in India and around the world. It is used for more than 3 decades now and more than 100 million women have been using this device worldwide (Oruc *et al.*, 2005; Tuncay *et al.*, 2004). Although it is considered relatively safe, it can cause many local complications of which migration outside the uterus is the most serious. Here we present a very rare case report where a long forgotten Copper T had migrated outside the uterus and resulted in recto-vesical fistula. The case was investigated and managed successfully by minimal invasive approach.

CASE REPORT

A 56yrs old house-wife presented with history of passage of air and occasionally scant amount of feces per urethra for last 6 months. She complained of vague lower abdominal pain and burning micturition for the same duration. On repeated enquiry about any past intervention, she gave history of Copper T insertion 16 yrs back.

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She had 3 children, all full term normal vaginal delivery and last childbirth was 18 yrs back. She attained menopause 8 yrs back. On examination, patient had mild pallor. On per abdominal examination, patient had mild lower abdominal tenderness. Per vaginal examination was normal. On per rectal examination, no abnormality was found. On investigation, blood reports were within normal limits except her hemoglobin was 9.2 gm%. On urinalysis, pus cells were 10-12/HPF, RBC-nil; culture showed growth of E.coli. Ultrasonography was done which revealed copper T in adnexa with one limb in rectum and other in urinary bladder (Figure 1). CT scan of the abdomen was done which corroborated the USG findings (Figure 2). Cystoscopy was done under spinal anesthesia which revealed strings of copper T inside the bladder with encrustation (Figure 3). Strings were gently pulled out cystoscopically by forceps and whole of the IUD was removed intact. There was no bleeding or fecal matter coming through the fistulous opening after Copper T removal. Per urethral Foley's catheterization was done. Patient was kept in bed rest for 3 weeks. Per urethral catheter was removed after 3 weeks. There was no complaint of pneumaturia or fecaluria after removal of catheter. MRI was done after 4 weeks which revealed complete healing of fistula (Figure 4).

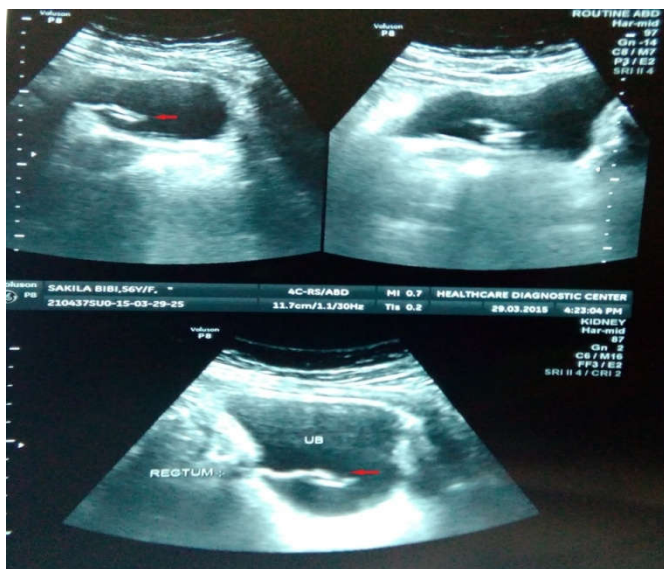


Figure 1. USG reveals recto-vesical fistula (Red color arrow)

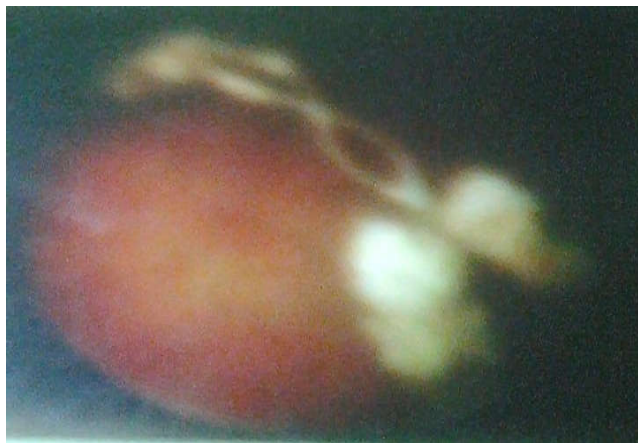


Figure 3. Cystoscopy image shows copper T (Arrow)

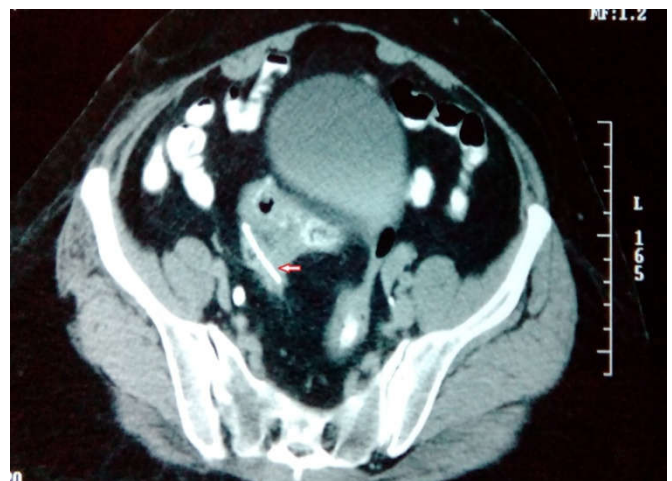


Figure 2. CT scan shows copper T (Arrow)

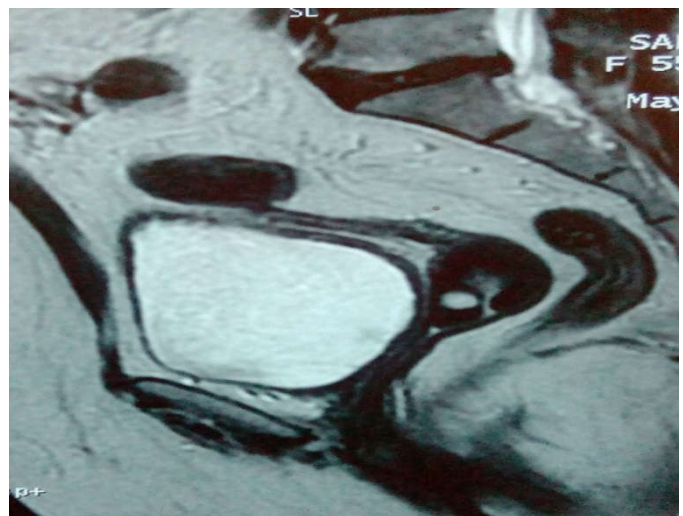


Figure 4. Post operative MRI shows no fistula tract

DISCUSSION

Intrauterine contraceptive device is a safe, cheap and popular method of contraception. It has been in use for more than 30 years (Yensel *et al.*, 2009) and is a widely accepted contraceptive measure worldwide especially in developing countries. But its use is associated with some complications like bleeding, dysmenorrhoea, chronic pelvic pain, ectopic pregnancy, uterine perforation and migration (Tuncay *et al.*, 2004; Eke and Okpani, 2003). There are more than 110 case reports in the literature about the migration of IUCD outside the uterus (Yensel *et al.*, 2003). In most of these cases, device were found inside the urinary bladder. Complication may occur at any time-during the time of insertion or afterwards. It depends on time and technique of insertion, type of IUD, experience of the physician and anatomy of the uterus and cervix (Thomalla, 1986). Most important of these is operator experience. The exact mechanism of perforation and transmigration is poorly understood. Spontaneous uterine contractions, bowel peristalsis, bladder contraction and soft & thin uterine wall (in puerperal period) may be responsible (Eke and Okpani, 2003). Though perforation and migration into urinary bladder is common, simultaneous migration into the bladder and rectum causing recto-vesical fistula is extremely very rare, as in our case. In fact, to the best of authors' knowledge, till date there is no such case reported in literature.

In this case, patient had completely forgotten about Copper T inserted 16 years ago until it migrated into the bladder and rectum causing lower abdominal pain, burning micturition, pneumaturia and occasionally fecaluria. After taking thorough history, physical examination is very important. Per vaginal examination has to be done to detect IUD device inside the vagina. When communication with bowel is suspected, digital rectal examination and visualization of rectum with anal speculum are important. In our case, it revealed no abnormality. When migration of IUD is suspected, pelvic ultrasonography is the first investigation to be done (Sepulveda *et al.*, 1993; Caspi *et al.*, 1996; Mahmutyazıcıoğlu *et al.*, 2002). It will detect the exact location of the device, calculus formation, pelvic abscess. CT scan is needed in selected cases for the diagnosis (El-Hefnawy *et al.*, 2008). If any fistula is suspected, contrast enhanced CT scan is to be performed to delineate exact nature, location, size of the fistula. If the patient has urinary complaints or USG shows intravesical migration, cystoscopy is done to locate the device inside the bladder, encrustation or calculus formation. Any migrated device should be removed for its potential complications (Migraci Tosun *et al.*, 2010). When the device has migrated into the bladder; cystoscopic examination is to be done. When possible, whole of the device can be removed cystoscopically. When there is stone formation, endoscopic lithotripsy is to be done to remove the stone. Endoscopic removal greatly decreases the morbidity of the patient. But the surgeon should

ensure that whole of the device is removed, not by piecemeal. It may leave some part of the device inside the abdominal cavity. After removal of the device, the opening in the bladder should be carefully examined for any potential complications like bleeding or anything coming out through the opening like air or fecal matter, specially dealing with a recto-vesical fistula as in our case. Though endoscopic method is tried as least invasive approach, one should not be hesitant to do an open laparotomy or laparoscopy if the fistula is large, bleeding is excessive or one can see feculent matter coming through the opening. In that case, formal open repair of the fistula with fecal diversion is necessary. In our case, as we suspected a small fistula, we first tried minimal invasive approach in the form of cystoscopy and removal of the device. We observed for 10 minutes. As the opening was small and there was no fecal matter coming out through the opening, we put a Foley's catheter and tried conservative treatment for the healing of the fistula. In the post-operative period, patient should be on strict bed rest. She should be carefully observed for pain abdomen, fever, any sign of peritonitis or passage of air or fecal matter through the catheter. Per urethral catheter should be kept for 3-4 weeks. Imaging (CT/MRI) is done to look for complete healing of fistula.

Conclusion

Migration of intrauterine contraceptive device is common. Any patient with the suspicion of migrated device should be properly examined and investigated. Any migrated device should be removed for its potential complications. Minimally invasive endoscopic approach is tried, when possible, because of less morbidity.

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