CASE REPORT

Migration of IUCD into the Urinary Bladder

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Introduction

The intrauterine device (IUCD) is the most widely used reversible method of contraception worldwide because of its contraceptive and cost effectiveness.¹ The primary mechanism of action of IUCD's appears to be prevention of fertilization as demonstrated by studies finding significantly decreased numbers of fertilized ova in the fallopian tubes of copper IUCD users compared with women who use no contraception. IUCD's also act by stimulating an inflammatory response in the uterine cavity, which decreases sperm transport, impedes the ability of sperm to fertilize the ovum and may be spermicidal. The copper in copper bearing IUCD's enhances this response.² The most common complications of IUCD's are excessive uterine bleeding, pelvic pain and pelvic inflammatory disease. Rarely an intrauterine device perforates the uterine wall during insertion.

The incidence of uterine perforation with IUCD ranges from 1 in 3,000.³ In 80% of perforations, the IUCD is freely located in the peritoneal cavity.⁴ Uterine perforation by an IUCD may lead to injury to the adjacent viscera i.e. rectum, sigmoid colon and appendix.⁵⁻⁷

In our case, uterine perforation by the IUCD, the interval between the insertion and beginning of the symptoms was two months. Our patient's main complaints were pelvic pain, dysuria and pricking sensation while passing urine.

Case Report

A 35 year old female para two complaining of intermittent pelvic pain, dysuria and pricking sensation while passing urine came to our out-patient clinic. She had two deliveries both by caesarean section. Four months after her last delivery IUCD Cu T 380 had been inserted. Following the insertion of IUCD, the patient reported that she had intermittent pelvic pain, dysuria and pricking sensation while passing urine. All these symptoms developed two months after insertion of IUCD. The bimanual pelvic examination revealed no abnormal findings. The strings of the IUCD were not protruding through the cervix. Therefore, migration of the IUCD to the abdominal cavity was suspected. Microscopic examination of the urine revealed pyuria with no hematuria. Haematological and biochemical parameters were normal. When the pelvis was examined by ultrasonography, IUCD could not be located in the intrauterine

Figure1: Free floating IUCD inside bladder

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Figure 2: Free floating IUCD inside bladder with adjacent uterus

cavity, it was found freely floating in the bladder (Fig. 1 & 2). An X-ray examination of pelvis revealed IUCD located more anterior towards symphysis pubis in the pelvis. With the presumptive diagnosis of missing IUCD in the urinary bladder case was discussed with urologist and patient was kept for cystoscopic removal of IUCD. Following cystoscopic removal of IUCD patient was kept under observation in the hospital intensive care unit overnight and next day she was discharged.

Discussion

The IUCD is the most widely used reversible method of contraception in the world.¹ In properly selected patients intrauterine devices are very reliable contraceptives. One of the complications of the IUCD is uterine perforation and very rarely the migration of the IUCD into bladder. The incidence of uterine perforation is closely related to the timing and technique of insertion, the type of IUCD used, the skill of the physician and the anatomy of the cervix and uterus.⁴⁻⁸ The true incidence of perforation is most likely higher because of frequently asymptomatic nature of perforation.⁹

Dictrick et al reported 18 cases of IUCD migrating into the urinary bladder is usually symptomatic causing supra pubic pain, irritative voiding symptoms, hematuria and menouria.^{3,11} These devices can encrust with deposits forming calculus. The means and timing of IUCD migration are not known.² However, a long symptoms free interval after insertion does not necessarily indicate that the migration was slow.¹² The interval between insertion and the beginning of symptoms varies from six months to sixteen years.¹⁰ In our case this interval was two months. At the time of perforation, the patient might not necessarily show any symptoms. Most perforations occur at or soon after insertion, especially when insertion is associated with pain.^{13,14} IUCD carrying women should check the strings of

IUCD regularly at the end of their menstrual period. If they fail to feel the strings of IUCD, ultrasonographic and/or x-ray examination must be performed to locate the missing IUCD. Intrauterine devices penetrating into the myometrium and visceral organs should be removed. In women carrying IUCD repetitive dysuria and hematuria should alert the physician to the possibility of bladder migration by the IUCD.

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