

Vesical Stone formation around a Partially Migrated Intrauterine Contraceptive Device

M. Rafique, A. I. Zaidi

Department of Urology, Nishtar Medical College and Hospital, Multan.

Introduction

Intra-vesical migration of intrauterine contraceptive device (IUCD) is a rare event. Many cases of complete intra vesical migration of IUCD have been reported in literature. We report a case of vesical calculus, which formed on a partially migrated contraceptive device.

Case Report

A 35 years old lady presented to the urology outpatient department with 2 months history of increased urinary frequency, dysuria and suprapubic pain. She also had intermittent mild hematuria of same duration. Her general physical examination was normal. Routine urinalysis revealed numerous pus cells and red blood cells. An X-ray plain KUB (Figure 1) showed an intra-uterine contraceptive device with calcification on the horizontal limbs. The patient had copper "T" IUCD placed 3 years ago. As per records the device was correctly placed in uterus and the procedure was uncomplicated. At vaginal examination performed by a gynecologist, the thread of the IUCD was not seen at the cervical os. An intra-venous urography was carried out which showed the device to be in the bladder. On post micturition film there was suspicion that the device was not completely present in the bladder (Figure 2).

Cystoscopy was carried out. There was calculus formation on the horizontal limbs of IUCD while its vertical limb was still embedded in the uterus. The

device was retrieved intact endoscopically (Figure 3). A foley catheter was retained. Her postoperative recovery was uneventful and she was discharged home after a week.

Discussion

Intra-uterine contraceptive device is considered to be an effective and reliable method of achieving contraception for family planning. However, such devices associated with complications e.g. spontaneous or septic abortion, migration into adjacent structures¹, bowel perforation and vesicouterine fistula formation.² Although erosion of IUCD into adjacent structures is an exceptionally rare event, intra-uterine devices have been found migrated into peritoneum, omentum, appendix, colon and bladder.¹ How and when the migration of an IUCD in to the urinary bladder occurs, is not clear. Migration both, within months³ and years⁴ after its insertion has been reported.

Presence of IUCD in bladder leads to urinary symptoms and in some cases calculus formation.⁵⁻⁷ The degree of stone formation is variable and independent of the duration in bladder.¹

Complete intra-vesical migration of IUCD and stone formation is reported in the literature. In the present case, stone formation occurred on a device that had only partially migrated in to the urinary bladder.

In a female patient with an IUCD inserted and presenting with lower urinary tract symptoms, the possibility of intra-vesical migration of the device should be considered in the differential diagnosis.



Figure 1. X-ray KUB showing calculus formation on the horizontal limb of IUCD.



Figure 2. Post-void film of an IVU showing only horizontal limb of an IUCD in bladder.

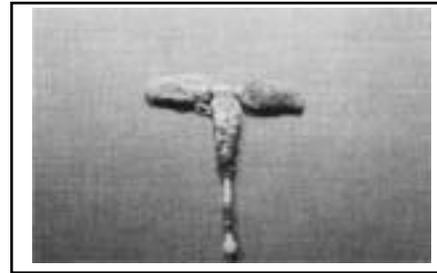


Figure 3. Retrieved intrauterine contraceptive device showing calculus formation on its horizontal limbs.

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