

An intrauterine device in the bladder mimicking urinary tract infection

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(Index words: Two pregnancies after IUD insertion, urolith formation on IUD)

Case report

A 22-year old woman with three children was admitted with a history of lower abdominal and vaginal pain of 9 months' duration. Pain was felt at the end of micturition and during walking. During this period she had repeated courses of antibiotics for urinary tract infection, but the pain persisted despite laboratory evidence of adequate treatment. When a psychiatry referral was planned in her local hospital she sought admission to the National Hospital of Sri Lanka, where a radiograph showed a copper-T intrauterine device in the lower abdomen. An ultrasound study confirmed this to be in the bladder.

She had had an intrauterine device (IUD) inserted 6 years previously, when her first child was 4 months old. A sharp pain accompanied its introduction and disappeared in a few days. She did not recall any haematuria or other urinary symptoms at the time. Nine months later, she became pregnant, and this was presumed to be due to spontaneous expulsion of the IUD. The pregnancy was uneventful. She had another uneventful pregnancy two years later.

When cystoscopy was done, the IUD with urolith formation around one of the arms and another over the tail was seen lying completely free (Figure). Its removal was completed by extraperitoneal cystostomy after attempts at removal by cystoscopy failed. The patient made an uneventful recovery.

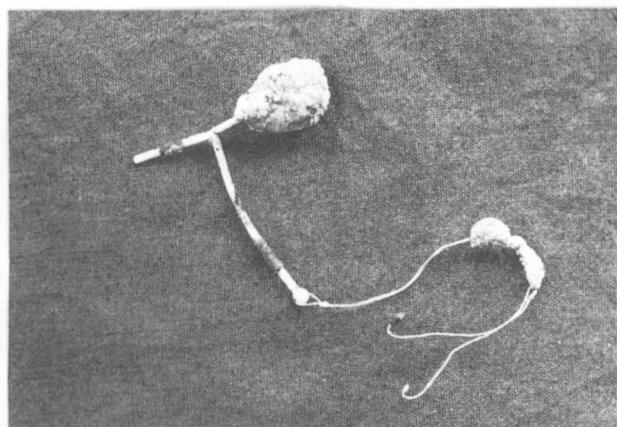


Figure. IUD with urolith formation removed at cystostomy.

Discussion

Migration of an IUD to the urinary bladder is rare (1). Many reported cases in fact deal with partial perforation (2). In this patient the device was lying completely free in the bladder. This may have contributed to her being free of symptoms for almost 5 years, since a T-shaped IUD would fit the triangular shape of the bladder with minimum disturbance.

An IUD could enter the bladder in one of several ways. First, there could be a direct introduction into the bladder *via* the uterus. A second method is partial perforation of the uterine wall at insertion, and gradual expulsion into the bladder due to action of the uterus (3). The rather unlikely possibility of direct transurethral insertion has been suggested in one report (4).

Pregnancy should raise suspicion of improper placement, transmigration, or expulsion of an IUD. Localisation during pregnancy is difficult except when the threads are felt, but a lost IUD must be looked for in the placenta and membranes at the time of delivery. If it is not found, expulsion must be confirmed by imaging of the abdomen and pelvis. The small size and softness of the uterus in the early months after childbirth call for great care during IUD insertion (5).

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