Case report: Vesical stone on partially migrated intrauterine contraceptive device

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Many cases of migration of intrauterine contraceptive devices (IUCDs) into the bladder had been reported, crystallization and proliferation with stone formation are usual events. Such patients presented with symptoms and signs of vesical stone. We report a vesical calculus that has formed on a partially migrated IUCD. 

Case report: A 28-year-old married woman (gravida 7, para 7), presented with history of dysuria, intermittency, mild attacks of passing red colored urine (hematuria), frequency and suprapubic pain for one month. She had history of IUCD insertion (6) years ago. Her physical examination was normal apart from mild tenderness in the suprapubic area. The usual laboratory investigations were performed; her general urine examination revealed (>15 pus cell and microscopic hematuria), ultrasonography reported a foreign body reflection within the bladder, which could be a vesical stone, and the KUB film showed a faint radio-opaque shadow at the center of the pelvis; again, this raised the possibility of a vesical stone. On, urothrocystoscopic evaluation a fixed large vesical stone attached to the posterior vesical wall was seen, figures (A, B, C). Disintegration of the stone was performed by a lithotrite, surprisingly the stone contained a coiled tan colored wire (the T-timb of the IUCD) inside it, and the trunk of the device was just partially fixed to the posterior wall of the bladder. The stone particles as well as the device were extracted from the bladder completely figures (D,E,F) and a Foley’s urethral catheter was put. The patient passed through a smooth postoperative period.

Discussion

Intrauterine contraceptive device is considered as a cheap, safe and effective method for achieving contraception and family planning. Though there are many reported complications associating placing of these devices; such as infection, pain, migration into adjacent structures, bowel perforation uterine fibula formation, even IUCD has been found in peritoneum, appendix, omentum, colon and bladder. The real cause behind migration of the device is still not understood yet. The duration from insertion to migration varies as well, some reported migration after months of insertion other reported years after that[1]. The presence of the IUCD inside the bladder causes irritant symptoms and provokes recurrent urinary tract infection and this will enhance stone formation[1]. Factors contributing to the possibility of uterine perforation are; inappropriate insertion or positioning of the IUCD, fragility of the uterine wall due to recent birth and abortion or pregnancy[2]. In general the migration of the IUCD and the perforation usually pass unnoticed; the diagnosis is made when the absence of the thread is noticed at routine examination and can, be proved by radiological examination[3]. Palpation reported a case similar to ours, in which the crystallization and stone formation was formed around a partially migrated device[4].

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Conclusion: In a female presenting with history of IUCD insertion several years before, and recurrent lower urinary tract symptoms not responding to the usual treatment, the possibility of migration of the IUCD device should be considered as a differential diagnosis.

References