

UNUSUAL LOCATION OF COPPER T WITHIN PERIVESICAL INFLAMMATORY MASS

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ABSTRACT

We present a case of 30-year-old woman with a history of insertion of intrauterine contraceptive devices (IUD) 03 years ago in whom threads of copper-T were missing. Ultrasound revealed the presence of Copper-T within inflammatory perivesical mass. Laparotomy was performed and copper-T was removed along with 2-3 ml of thick pus/ blood from the subserosal plane of the urinary bladder.

Key Words: Intravesical migration, IUCD, Copper T, intrauterine device

Introduction

A 30 year old woman (P3L3A0) presented to our institution with complaints of pain in the lower abdomen off and on for 04 months and incontinence of urine for 3 months. She had no history of vaginal discharge, haematuria, menstrual irregularity or fever. There was a history of insertion of Copper-T intrauterine device 03 years ago. The threads of copper-T were missing since 01 year. Her ultrasound revealed a solid looking hypoechoic structure in contact with and merging with right sided superolateral wall of the urinary bladder (Fig. 1). The structure measured 3.8 x 2 cm (Fig. 1-3). An echogenic linear structure was seen traversing it centrally from end to end. A sonological diagnosis of displaced copper T with inflammatory reaction in contact with right side of the superior wall of urinary bladder was given. No mass, calculus or blood clots were seen in the lumen of urinary bladder. Uterus appeared normal in size without any disruption of its walls. Fluid was seen in the cul-de-sac (Fig. 4). X-ray pelvis clearly showed a Copper T device placed slightly to the right of the midline (Fig. 5).

Laparotomy was performed. Copper T was palpable from outside. Copper-T was embedded in an organized haematoma/ abscess. Serosa of the bladder wall was

opened. Haematoma and abscess was removed along with Copper T and bladder was repaired with chromic. Patient was discharged on 6th post-operative day. Post operative ultrasound was done one month after surgery. It revealed normal superior wall of the urinary bladder with no evidence of hypoechoic structure. X-ray pelvis also was normal.

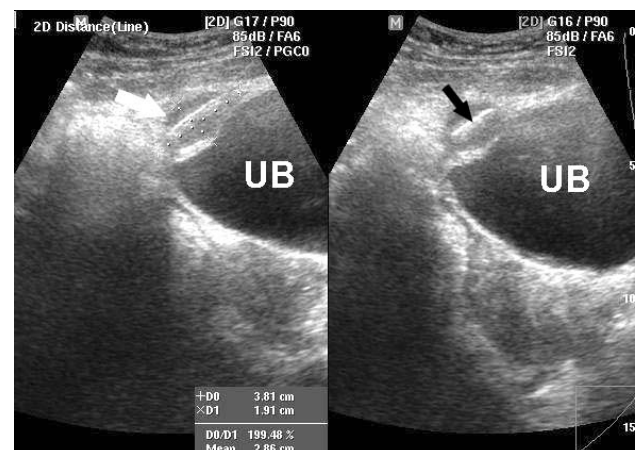


Figure 1: 30 year old woman with perivesical migration of Copper-T intrauterine contraceptive device embedded within a hypoechoic lesion. Transabdominal grayscale sagittal ultrasound of the pelvis (3.5 MHz Probe. Sonoace Medison). The hypoechoic structure measures 3.8 x 1.9 cm. Copper-T seen as linear echogenic structure within the centre of the lesion. UB= urinary bladder, white arrow = inflammatory perivesical mass, Black arrow = Copper-T seen as echogenic linear structure.

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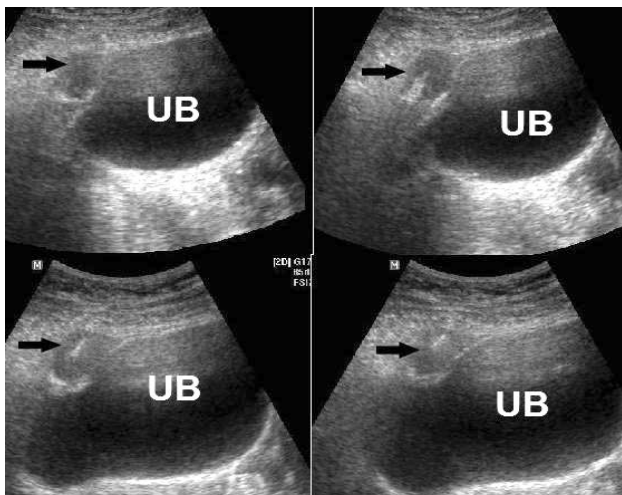


Figure 2: 30 year old woman with perivesical migration of Copper-T intrauterine contraceptive device embedded within a hypoechoic lesion. Transabdominal grayscale Transverse ultrasound of the pelvis (3.5 MHz Probe. Sonoace Medison) at four different levels. Copper-T seen as linear echogenic structure within the centre of the lesion (black arrow). UB= urinary bladder

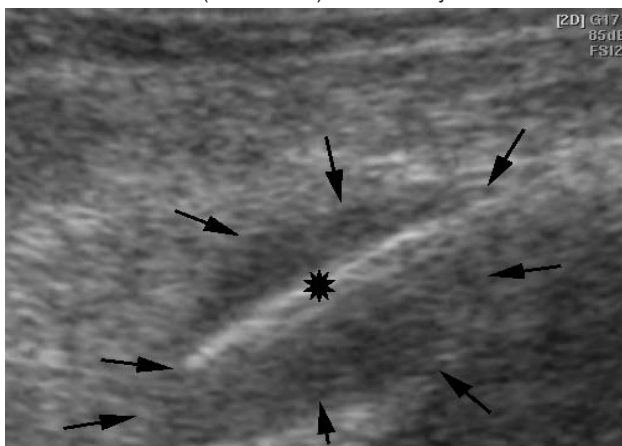


Figure 3: 30 year old woman with perivesical migration of Copper-T intrauterine contraceptive device embedded within a hypoechoic lesion. Transabdominal grayscale Transverse ultrasound of the pelvis (3.5 MHz Probe. Sonoace Medison). Magnified view of the perivesical location of copper-T (asterisk) contained within the hypoechoic oval shaped structure (arrows).

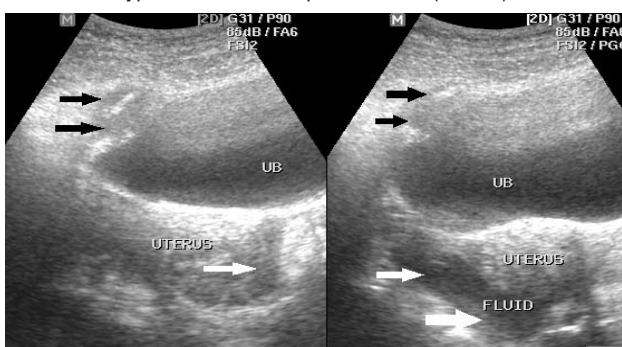


Figure 4: 30 year old woman with perivesical migration of Copper-T intrauterine contraceptive device embedded within a hypoechoic lesion (black arrows). Transabdominal grayscale Transverse ultrasound of the pelvis (3.5 MHz Probe. Sonoace Medison). Free fluid (white arrows) is seen in the cul-de-sac posterior to the uterus. UB = Urinary Bladder



Figure 5: 30 year old woman with perivesical migration of Copper-T intrauterine contraceptive device. X-ray of the pelvis demonstrates a Copper-T device within the right sided hemipelvis.



Figure 6: 30 year old woman with perivesical migration of Copper-T intrauterine contraceptive device: Postoperative image showing removed Copper-T.

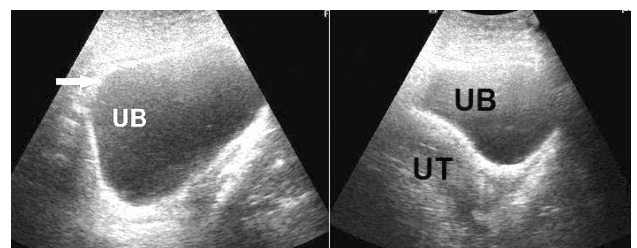


Figure 7: 30 year old woman with perivesical migration of Copper-T intrauterine contraceptive device embedded within a hypoechoic lesion. Transabdominal grayscale Transverse ultrasound of the pelvis (3.5 MHz Probe. Sonoace Medison) done one month after removal of Copper-T. White arrow= Normal superolateral wall of the urinary bladder. No fluid is seen in the cul-de-sac. UB = Urinary Bladder, UT = Uterus



Figure 8: 30 year old woman with perivesical migration of Copper-T intrauterine contraceptive device. X-ray of the pelvis demonstrates removal of Copper-T device.

Discussion

Intrauterine devices are associated with many early and late complications, including perforation and migration into adjacent structures.¹ The importance of post-insertion follow up and the need for awareness of migration of IUCD including intravesical migration cannot be overemphasized. IUCD has been used as an effective, safe and economic method of contraception for many years. Since its introduction, many complications have been reported which include dysmenorrhoea, hypermenorrhoea, pelvic infection, pregnancy, septic abortion, uterine perforation and migration into adjacent organs.^{2,3} Although the process of IUCD migration into the bladder is gradual and accompanied with complications such as cystitis, hematuria, and pelvic pain, most of the perforations occur at the time of insertion. Pelvic ultrasound examination should be performed in every patient with unexplained lower abdominal pain who is known to carry an intrauterine contraceptive device.⁴ Factors raising suspicion of uterine rupture include insertion of the device by inexperienced persons, inappropriate position of the IUCD, susceptible uterine wall due to multiparity, and a recent abortion or pregnancy.⁵ Calculus formation over intravesical copper T has also been reported.⁶

Teaching Point

Spontaneous migration of intrauterine devices into the bladder or perivesical tissues is a rare complication and should be taken into consideration while performing ultrasound of the bladder.

References

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