TRANSLOCATION OF AN INTRAUTERINE CONTRACEPTIVE DEVICE INTO THE BLADDER: A CASE REPORT

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ABSTRACT

Introduction: *The most popular method of reversible contraception in women is the intrauterine contraceptive device (IUD).The risk of perforation elevates during the postpartum period, as well as during lactation and amenorrhea.The likelihood of perforation is higher in lactating women and during IUD insertion within 36 weeks after childbirth.* ***Objective:*** *This case report details the migration of an Intrauterine Device (IUD) into the bladder.* ***Case(s) Presentation:*** *A woman in her 40s had been experiencing persistent urinary tract infections (UTI) for a year. Four years after the birth of her third child, the patient had an IUD inserted. Unexpectedly, one year later, she delivered her fourth child. Following seven years, she experienced persistent UTI symptoms. The IUD was identified by plain abdominal radiography and removed utilizing cystoscopy and vesicolithotripsy procedures.* ***Discussion:*** *It has been well known that IUD dislocation likelihood is high during IUD insertion within 36 weeks after childbirth. Our case is exceptionally rare since the IUD insertion took place four years after delivery.* ***Conclusion:*** *We highlight the importance of considering the possibility of IUD migration when the user gives birth and then experiences persistent UTI. Plain radiography can discover the location of the IUD, and cystoscopy and vesicolithotripsy can be used for removal.*

Keywords:*Bladder,intrauterine contraceptive device, plain abdominal radiography, translocation, urinary tract infection.*

ABSTRAK

Pendahuluan: *Metode kontrasepsi reversibel yang paling populer pada wanita adalah alat kontrasepsi intrauterin (IUD). Risiko perforasi meningkat selama periode pascapersalinan, serta selama menyusui dan amenore. Kemungkinan perforasi lebih tinggi pada wanita menyusui dan selama pemasangan IUD dalam waktu 36 minggu setelah melahirkan.* ***Tujuan:****Laporan kasus ini menguraikan migrasi Alat Kontrasepsi Intrauterin (AKI) ke dalam kandung kemih.* ***Presentasi kasus:*** *Seorang wanita berusia 40-an telah mengalami infeksi saluran kemih (ISK) persisten selama setahun. Empat tahun setelah melahirkan anak ketiganya, pasien dipasang AKI. Tidak disangka, satu tahun kemudian, dia melahirkan anak keempat. Tujuh tahun setelah itu, dia mengalami gejala ISK persisten. AKI diidentifikasi melalui foto polos abdomen dan diangkat menggunakan prosedur sistoskopi dan vesikolitotripsi.* ***Diskusi:****Telah banyak diketahui bahwa migrasi AKI lebih tinggi kemungkinan terjadi saat pemasangannya dalam periode kurang dari 36 minggu setelah melahirkan. Kasus kami sangat langka karena pemasangan AKI terjadi lebih dari 4 tahun setelah melahirkan.* ***Simpulan:*** *Kami menekankan pentingnya mempertimbangkan kemungkinan migrasi AKI ketika penggunanya melahirkan dan kemudian mengalami ISK persisten. Foto polos abdomen dapat menemukan lokasi AKI, dan sistoskopi serta vesikolitotripsi dapat digunakan untuk pengangkatan.*

Kata kunci: *Kandung kemih,alat kontrasepsi intrauterin, foto polos abdomen, migrasi, infeksi saluran kemih.*

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INTRODUCTION

The most popular method of reversible contraception in women is the intrauterine contraceptive device (IUD).[1,2] The risk of perforation elevates during the postpartum period, as well as during lactation and amenorrhea.[3,4] The likelihood of perforation is higher in lactating women and during

IUD insertion within 36 weeks after childbirth.[5]

We report a case of a 40-year-oldwoman who gave birth despite having an IUD and then experiencing recurrent urinary tract infection (UTI). This article elucidates that the IUD was inserted four years after the patient gave birth without pain and vaginal bleeding after the insertion, thereby contributing valuable data to research predicting the likelihood of intravesical migration of IUDs.[3,5,6]

CASE(S) PRESENTATION

Four years after the birth of her third child, the patient had an IUD inserted. Unexpectedly, a year later, she delivered her fourth child, pervaginam. Three years after her last partus, she got lower abdominal pain and dysmenorrhea. In the same year, after performing abdominal ultrasonography (US) by the gynecologist, it was found that she had a myoma uterine. A curettage procedure was performed, and no sign of an IUD was found.

Three years after her curettage procedure, she started experiencing repeated lower UTI symptoms. Her attending practitioner treated her for one year, but the symptoms persisted. She was, therefore, referred to the urologist. Abdominal US revealed a bladder calculus stone (Figure 1). Further confirmation was performed using plain abdominal radiography, and an IUD was found in the pelvic cavity (Figure 2).

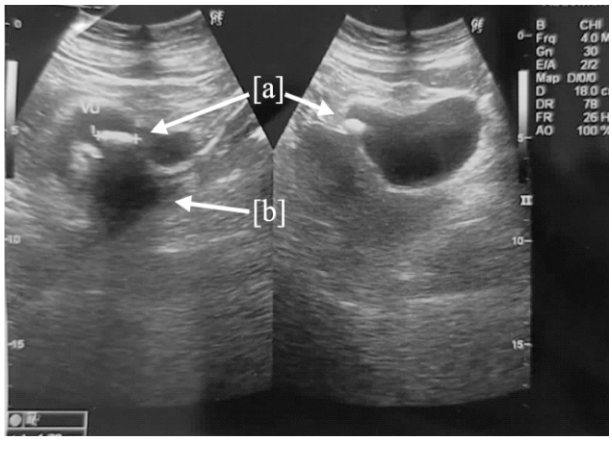


Figure 1. US finding of the bladder stone. It shows a hyperechoic lesion with a length of 1.78 cm [a] above the acoustic shadow [b].

Afterward, the urologist performed a cystoscopy to confirm the presence of the IUD and found it on the dome of the bladder, then removed it using cystoscopy and vesicolithotripsy procedure (Figure 3). The patient's symptoms entirely resolved. She no longer had any signs of urinary leakage one week after the procedure.

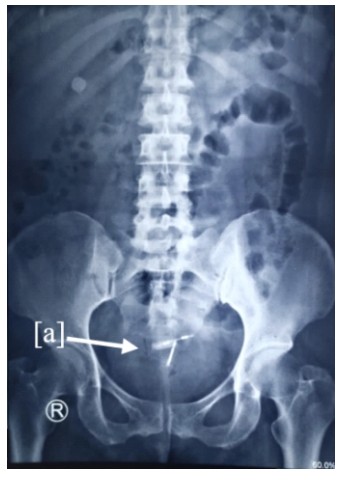
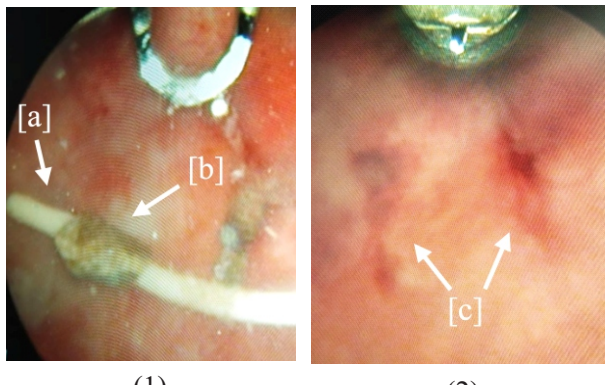


Figure 2. Plain abdominal radiography shows an IUD [a].



(1) (2)

Figure 3. (1) Cytoscopy finding of the IUD [a] and the stone [b]. (2) The bladder wall lesion after the IUD removal [c].

DISCUSSION

The translocation of an IUD can occur because of the mechanical force applied during insertion, uterine contractions, or erosion of the uterine wall.[7] The likelihood of IUD perforation increases when the IUD is inserted during specific periods: within the first 36 weeks postpartum,[5] the

first six weeks postpartum,[6] and during breastfeeding and amenorrhea.3[4] However, in our case, the IUD was inserted four years after the patient gave birth to her third child.

Primary perforation of the IUD is usually associated with severe abdominal pain during insertion. In contrast, secondary perforation can occur due to slow migration through the myometrium.[8] Our case indicates fast migration within three months since the IUD placement. It is an exceptionally rare case since the IUD insertion took place more than 36 weeks after childbirth. This phenomenon lacks support from existing scientific explanations, and we are currently unable to comprehend its underlying causes.

If the threads of the IUD are not visible during a check-up using the abdominal US, it cannot be ruled out that perforation has occurred.9 In our case, an abdominal US examination was performed for the myoma, but no sign of an IUD was found inside the uterus. Perhaps the IUD had already migrated to the bladder.

We performed plain abdominal radiography to confirm the bladder stone, and it also easily detected the IUD inside the pelvic cavum.[10] We opted not to perform Computed Tomography (CT) with contrast due to the adequacy of plain radiography for imaging the IUD. This choice was more suitable since the patient belonged to the low-income group and was covered by Indonesia's National Health Insurance (NHI).

Our patient had recurrent UTI for years without being referred to a urologist, and neither a CT scan nor plain radiography was performed. This circumstance arose because UTI was deemed within the competence of general practitioners to handle.[11] Since the patient used the NHI, she could not visit a specialist without a prior referral. Her economic conditions also did not allow her to have a specialist consultation on her own.

For the management, we performed a cystoscopy to remove the IUD because it was visible and was not embedded firmly in the bladder nor near a blood vessel.[8] Also, cystoscopy is the best method for visualizing and removing an intravesical IUD.[12,13]

CONCLUSION

If a woman with an IUD inserted gets pregnant and then experiences recurrent UTI, it may indicate that the IUD has migrated to the bladder.In such a case, it is recommended to undergo plain radiography.If the IUD is visible and is not firmly embedded in an organ or blood vessel, minimally invasive methods such as cystoscopy could be performed.

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