

Detection of a symptomatic displaced intrauterine contraceptive device: Case report

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Abstract

Case Report depicting the detection of a displaced Intrauterine Contraceptive Device (IUD) with 3D Ultrasound. The displacement of the IUD was not detected with 2D Ultrasound, yet was visualized with 3D Ultrasound, explaining the patient's discomfort and abnormal uterine bleeding, which resolved with its removal. The IUD appeared to have migrated to an upside-down position.

Keywords

intrauterine contraceptive device; 3D ultrasound; displaced detection lost

Introduction

Long-acting reversible contraception (LARC) has been promoted among practicing obstetrician-gynecologists lately, especially in adolescents, [1] and its use has increased as a result, including the use of the intrauterine contraceptive device (IUD) [2]. A number of problems can be associated with the use of the IUD, though most such issues may represent benign effects (e.g. bleeding and cramping) [3]. Other IUD-associated problems may include spontaneous extrusion, uterine perforation, breakage, infection and migration/displacement. We present a case report depicting displacement of an IUD to an upside-down position, for which this displacement was undetectable with a 2-D ultrasound, but which was found through use of 3D ultrasound imaging of the pelvis.

Case Report

43 y/o G₂ P₂₀₀₂ white female who complained of persistent pelvic pain, irregular bleeding and an inability to detect the Mirena IUD string, which had been inserted in 2014, without any problems since then. She reported a history of Crohn's Disease and nephrolithiasis. She had a surgical history of a laparoscopic cholecystectomy and a lithotripsy.

After presentation, an abdominal X-Ray was obtained (**Figure 1**), and then a routine 2D pelvic ultrasound was obtained (**Figure 2**). Since the patient's discomfort continued, even after reassurance that the IUD was in proper position, a 3D transvaginal sonogram was obtained (TVS). The rendered view is displayed as **Figure 3**. It revealed that the IUD was in utero, but in an upside-down position (only recognized with the 3D ultrasound view), probably explaining the patient's complaint of persistent discomfort and abnormal uterine bleeding.

Discussion

With the increased use of the IUD today, we may see such cases in the future, and offer this case report as an example of the clinical value of 3D ultrasound use in gynecology. As can be readily seen, the position of a displaced IUD (i.e. upside-down position) cannot be easily recognized with a 2D ultrasound scan, yet can be with 3D ultrasound. Of course, the X-Ray imaging found it in the pelvis, and the 2D Ultrasound found it in the uterus. However, the missing IUD string had been pulled up into the uterine cavity, with its migration to the upside-down position. The IUD's resultant position, with its arms pushing into the uterine lower segment (rather than the usual position at the uterine fundus), apparently caused the patient's reported discomfort and abnormal uterine bleeding. With the 3D visualization, this circumstance was detected, leading to the IUD removal that was warranted.

Displacement of an IUD, using 3D Ultrasound, has been previously demonstrated. [4] This diagnostic ability is something for which all gynecologic providers should be aware.

Figures



Figure 1: X-Ray showing oblique position of the IUD.

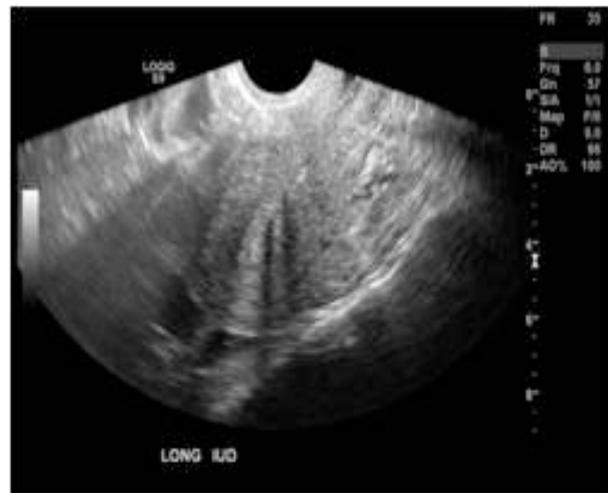


Figure 2: Sagittal 2D Ultrasound showing the intracavitary presence of the IUD.

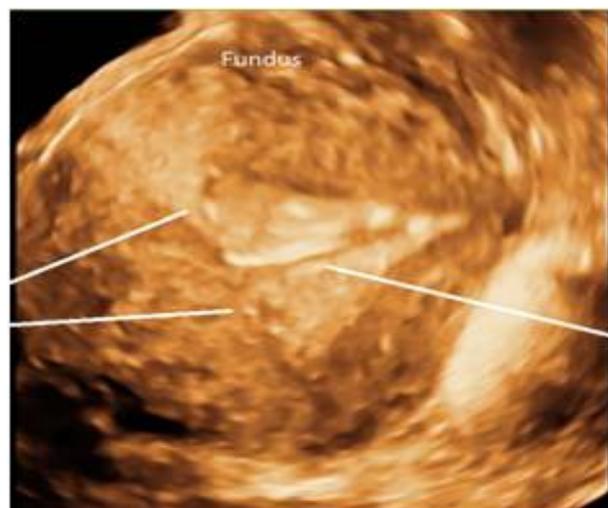


Figure 3: With visualization (3D Rendering mode), the actual intrauterine malposition of the IUD was able to be appreciated.

References

1. Francis JKR, Gold MA: Long-Acting Reversible Contraception for adolescents: A review. *JAMA Pediatr* 2017; 171(7): 694-701.
2. Howard B, Grubb E, Lage MJ, Tang B: Trends in use of and complications from intrauterine contraceptive devices and tubal ligation or occlusion. *Reprod Health* 2017; 14(1): 70.
3. Jatlaouj TC, Riley HE, Curtis KM: The safety of intrauterine devices among young women: A systematic review. *Contraception* 2017; 95(1): 17-39.
4. Benacerraf BR, Shipp TD, Bromley B: Three-dimensional ultrasound detection of abnormally located intrauterine contraceptive devices which are a source of pelvic pain and abnormal bleeding. *Ultrasound Obstet Gynecol* 2009; 34(1): 110-115.

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