

The Displaced Intrauterine Device. An Ultrasound Diagnosis with a Hysteroscopic Solution

Angelis MCD^{1*}, Chiara C², Alfonso M¹, Carugno JT³, Gallo A¹, Sardo ADS¹ and Zizolfi B¹

¹Department of Public Health, University of Naples “Federico II”, Naples, Italy

²Department of Health Sciences, Division of Obstetrics and Gynecology, Careggi Hospital, University of Florence, Florence, Italy

³Department of Obstetrics and Gynecology, Miller School of Medicine, University of Miami, Miami, FL, USA

*Corresponding author:

Maria Chiara De Angelis,
Department of Public Health, University of Naples
“Federico II”, Naples, Italy (80126)

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Originally developed as a long-acting reversible contraceptive (LARC), the hormone-releasing Intrauterine System (IUS) is now also indicated for the treatment of heavy menstrual bleeding (HMB) because of its suppressive effect on the endometrium [1-2]. When displaced but still inside the uterine cavity, management options include removing it and replacing it with a new one or hysteroscopic relocation of the IUS, avoiding the increased cost of using another IUS to replace it [3-4].

A 39-year-old-woman presented to our Hysteroscopy Unit with HMB and sharp left lower quadrant pain three days after the insertion of a Levonorgestrel Intrauterine System (LNG-IUS). Three-dimensional coronal ultrasound (Figure 1) identified the malpositioned IUS revealing the stem correctly positioned in the center of the uterine cavity but with both arms obliquely tilted to the left, with one arm embedded into the left tubal ostium. Immediately after the ultrasound, outpatient hysteroscopy, using a 5mm continuous flow office hysteroscope with low intrauterine pressure, was performed, confirming the ultrasound findings (Figure2a-b). A 5Fr grasping forceps was used to directly mobilize the embedded arm of the IUS from the left uterine ostium and place it in the desired position (Figure3a). The patient tolerated the procedure well. No anesthesia was needed. After concluding the procedure, a 3D-Ultrasound was performed, revealing the IUS properly positioned

within the uterine cavity (Figure3b-3c).

Reported IUD complications include spontaneous expulsion, malposition and uterine perforation. Although rare, uterine perforation can cause serious problems such as heavy vaginal bleeding, pelvic pain, and bowel or bladder perforation [2,4]. Our case highlights the important role of 3D-Ultrasound as the first-line imaging modality for the evaluation of the suspected malpositioned IUS, allowing for a more accurate evaluation of the position of the arms of the IUS [5]. Outpatient hysteroscopy plays an important role in the management of the malpositioned IUS, allowing to reposition the same IUS into the correct location, avoiding the extra expense of replacing it with another one [3-4].

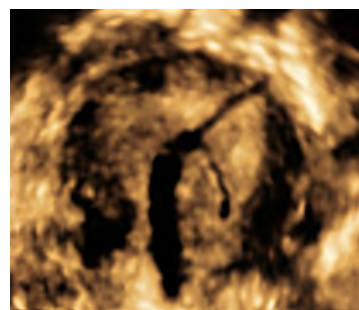


Figure 1: 3D-Ultronography reconstruction of a displaced IUS.

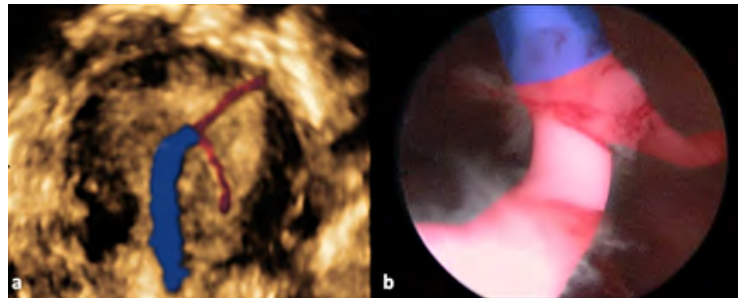


Figure 2: Comparison of 3D-Ultrasound (a) and (b) Hysteroscopic view of the malpositioned IUS. The IUS's arms are shown in red, and the stem is in blue color.

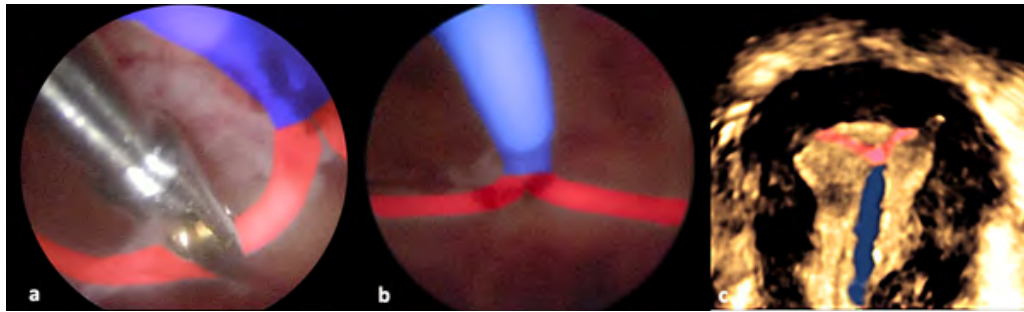


Figure 3: Hysteroscopic repositioning of IUS. By applying gentle traction on the arm with a grasping forceps (a), the IUS is relocated to the center of the uterine cavity, reaching the correct intrauterine position (b).

References

1. Rodriguez MB, Lethaby A, Jordan V. Progestogen-releasing intrauterine systems for heavy menstrual bleeding. *Cochrane Database Syst Rev.* 2020; 6(6): CD002126.
2. Myo MG, Nguyen BT. Intrauterine Device Complications and Their Management. *Curr Obstet Gynecol Rep.* 2023; 12: 88-95.
3. Di Spiezio Sardo A, Campo R. State of the art. hysteroscopic approaches to pathologies of the genital tract. *EndoPress.* Version: 2.0-04-2022.
4. Turok DK, Gurtcheff SE, Gibson K, Handley E, Simonsen S, Murphy PA, et al. Operative management of intrauterine device complications: a case series report. *Contraception.* 2010; 82(4): 354-357.
5. 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): 110-5.