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## **Embedded IUD/IUCD in multiparous female – Case Report and Retrieval Options.**

### **Aim**

An intrauterine device (IUD), also called intrauterine contraceptive device (IUCD), is one of the most effective reversible contraceptive methods available for female contraception worldwide. In competent hands, it is easy to insert, however, an IUD may perforate the uterus or migrate and/or embed in the uterine muscle or nearby structures. While patients may remain asymptomatic, these complications can decrease contraceptive effectiveness, cause damage to adjoining organs or cause abdominal/pelvic pain and necessitate surgical intervention.

This is a case of a 33-year-old G3P3 with Class III obesity and no prior history of cesarean section, uterine anomalies, or fibroids who presented with painful, heavy menstruation. She had a copper IUD placed while she was living in Mexico nine year ago. On pelvic examination, the IUD thread was not visible at the internal cervical os. Her pregnancy test was negative and she had normal hemoglobin. Attempts at IUD localization or retrieval with cytobrush, uterine sound or IUD hook were unsuccessful. She was appropriately counseled about her options, alternatives, risks, benefits and she chose to have the IUD removed. We aim to provide result-based decision making for the escalation of care for complex IUD removal.

## **Methods**

This is a case report and exempt from institutional review board (IRB) application.

## **Results**

A pelvic ultrasound demonstrated an anteverted uterus measuring 9 cm in length with normal echotexture, and no parenchymal abnormalities. A linear echogenic structure was observed within the endometrial canal and encroaching on the uterine wall, and a T-portion was located at the distal aspect. No fluid was detected in the posterior Cul-de-sac. Several small cervical nabothian cysts were noted.

She had failed other attempts at retrieval of the IUD in the office, subsequently counseled about her options and she chose to have hysteroscopy and removal of IUD with dilation and curettage (D&C). Hysteroscopy was performed under anesthesia, and successful removal of the IUD using endometrial polyp forceps. A postprocedure D&C yielded endometrial tissue with no polyps and no complication. She tolerated the procedure well and was discharged home in stable condition. She planned to use condoms for contraception.

## **Conclusion:**

Managing complications associated with embedded IUDs requires a systematic approach due to the potential for migration to areas such as the abdomen, omentum, or tubal migration, alongside risks such as fragmentation and expulsion. Prompt recognition and intervention are vital, especially in cases of heavy menstrual bleeding and symptomatology. A multifactorial strategy, integrating imaging modalities for localization including ultrasound and in difficult cases plain abdominal X-ray or CT-scan may be necessary. However, Copper IUDs are easier to identify than non-Copper IUDs.

Initial attempts at retrieving the IUD with cytobrush or IUD hook should be first line treatment. The use of uterine sound is helpful to identify an intrauterine IUD but plays to role if the IUD is extra-uterine or deeply embedded in the uterus. Hysteroscopy facilitates precise visualization and retrieval of the IUD and an opportunity to address any associated endometrial pathology. Tailored

care based on patient preferences and family planning considerations is essential. Educating patients about potential complications and management options is imperative for informed decision-making. Prioritizing patient empowerment can mitigate risks and enhance reproductive health outcomes.