

Two Cavities, One Solution: Endometrial Ablation Using Lina Librata in Uterine Didelphys

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Background

- *Müllerian duct anomalies* result from incomplete development, canalisation or fusion of the paired Müllerian during embryogenesis (12-16 weeks' gestation)
- Prevalence in general population is estimated at 0.5-5%, and is higher in patients with infertility or recurrence pregnancy loss [1]
- *Uterine didelphys* is a rare anomaly characterised by complete lack of Müllerian duct fusion, resulting in two uteri, two cervices and often a longitudinal vaginal septum
- *Associated complications* include dysmenorrhea, menstrual abnormalities and reproductive implications including subfertility and recurrent miscarriages.
- *Adverse obstetric* include preterm delivery, fetal malpresentation, caesarean section and fetal growth restriction
- Endometrial ablation in uterine anomalies requires caution due to distorted anatomy and risk of incomplete ablation
- This case report details successful application of endometrial ablation for a patient with uterine didelphys presenting with menorrhagia

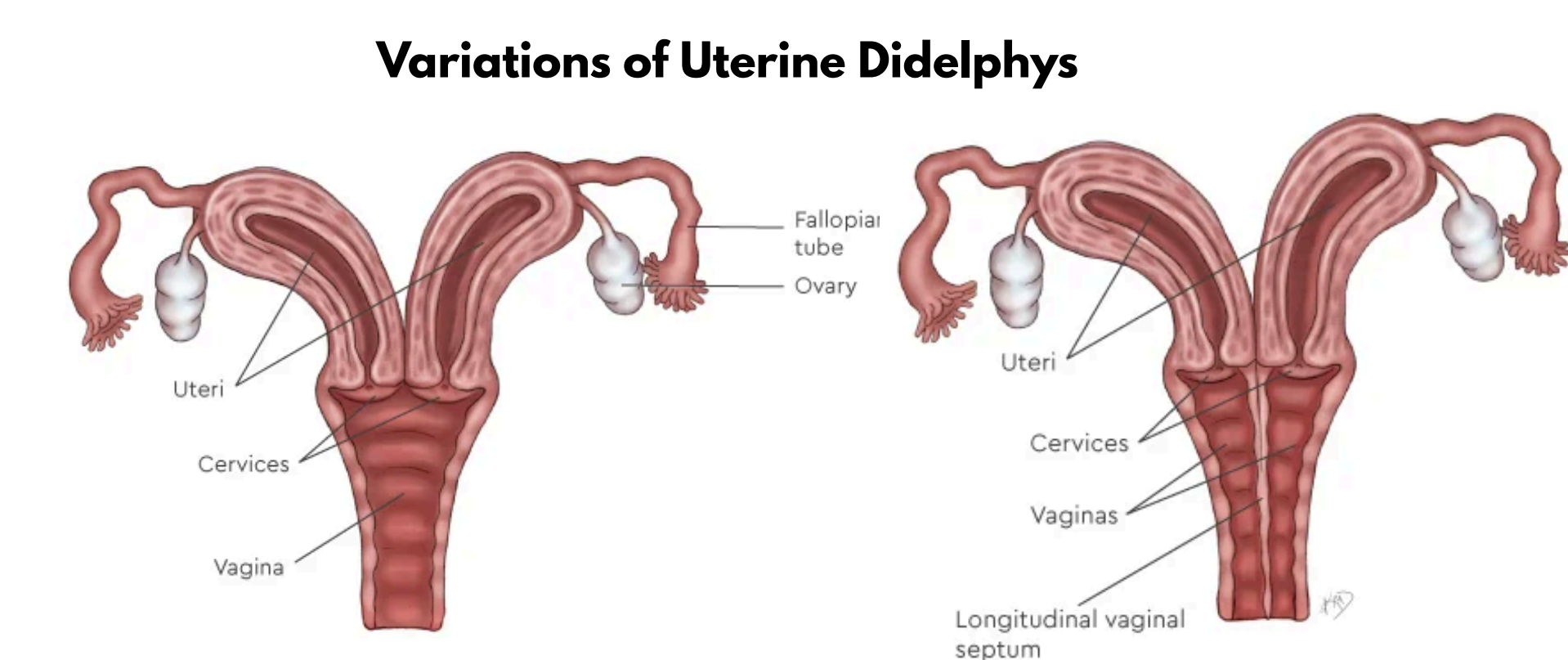


Image adapted from Regents of University of Colorado

Case

Patient Background

- 46 years, Gravida 4 Para 3 with known uterine didelphys
- History: 3 cesarean sections, bilateral tubal ligation and long-standing menorrhagia
- Symptoms: Periods lasting ~12 days, intermenstrual bleeding, only 3–4 bleed-free days per cycle
- Prior treatments: various hormonal contraction including depot medroxyprogesterone acetate and Mirena IUS

Initial Findings

- Examination: Longitudinal vaginal septum, two vaginas and two cervices
- Pelvic MRI: Confirmed uterine didelphys with two separate endometrial cavities
- HPV Screening: Positive for high-risk strain, low-grade dyskaryosis
- Colposcopy: Difficult visualization → EUA and biopsy from both cervices → Type 3 SCJ, no dysplasia
- Hysteroscopy findings:
 - Right uterus: Normal cavity, one visible ostium
 - Left uterus: Two small endometrial polyps, surgically resected, one visible ostium
 - Histology: no malignancy or hyperplasia from endometrial biopsy or polyps

Thermal ablation

- Persistent Menorrhagi despite Mirena coil insertion
- Second hysteroscopy was unremarkable
- Thermal endometrial ablation was successfully performed using the Lina Librata system
- This case required the use of two separate Lina Librata devices, one for each endometrial cavity.

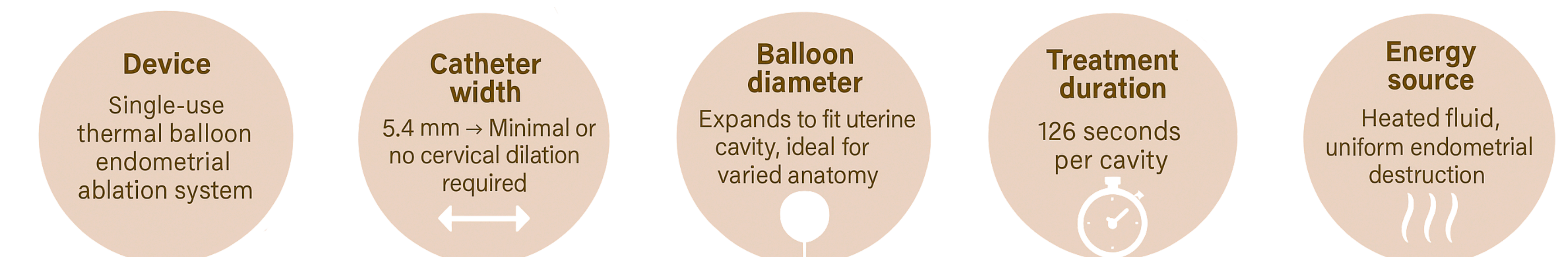


Outcome

- Post-procedure, the patient experienced significant reduction in bleeding, with improved quality of life.

Discussion

Why Lina Librata?



Review of literature:

- *Hydrothermal endometrial ablation* has been as effective in a 39-year-old woman with uterine didelphys, with marked improvement in menorrhagia symptoms post-procedure[2]
- *ThermaChoice III balloon thermal ablation* has been successful as conservative therapy for heavy menstrual bleeding in a 44-year-old patient with a background of recurrent miscarriage and uterine didelphys [3]
- *Microwave endometrial ablation* in a 44-year-old patient with refractory menorrhagia and uterine didelphys showed favorable outcomes with sustained symptom relief [4]

These cases highlight the feasibility and clinical benefit of individualized endometrial ablation techniques in patients with congenital uterine anomalies. To date, our report is the first to document the use of the Lina Librata thermal balloon ablation system in a patient with uterine didelphys.

Conclusion

To our knowledge this is the first case describing the successful use of thermal balloon ablation device Lina Librata in a case of uterine didelphys

The technique was:

- Technically feasible with appropriate planning
- Well tolerated with no intra- or post-operative complications
- Clinically effective, reducing menorrhagia symptoms significantly

This case supports the safe and effective use of thermal ablation as a uterus-preserving treatment in selected patients with uterine anomalies and refractory AUB.

References:

- [1] Saravelos SH, Cocksedge KA, Li TC. Prevalence and diagnosis of congenital uterine anomalies in women with reproductive failure: a critical appraisal. Hum Reprod Update. 2008 Sep-Oct;14(5):415-29
- [2] Jackson TR, Caceres A. Endometrial Ablation in Uterine Didelphys. Journal of Minimally Invasive Gynecology. 2012; 19(6):S175
- [3] Chapa HO, Venegas G, Antonetti AG. One patient, two uteri, two endometrial ablations: case report of thermal balloon ablation in uterine didelphys. Fertil Steril. 2011 May;95(6):2123.e5-7
- [4] Tawfeek S, Sharp N. Successful microwave endometrial ablation (MEA™) in uterus didelphys. Journal of Obstetrics and Gynaecology. 2006; 26(6), 582–583