

INTRODUCTION :

- Abnormal fusion or incomplete absorption of the Müllerian ducts leads to congenital uterine anomalies, [incidence of 1/1200 to 1/600 fertile women]
- Most anomalies are asymptomatic and undiagnosed until associated with infertility or recurrent pregnancy loss.
- These anomalies lead to serious reproductive issues, including abortion, preterm labor, malpresentations, and breech deliveries.
- Concurrent renal anomalies are often associated due to shared embryological origins.

OBJECTIVES :

- 1.To correct congenital uterine anomalies by unifying the uterine cavity.
- 2.To improve fertility and reproductive outcomes in women with structural anomalies.
- 3.To establish metroplasty as a safe and effective surgical option for such anomalies.

METHODS :

- Patient Selection: Women presenting with infertility or recurrent pregnancy loss associated with bicornuate or didelphys uteri.
- **Procedure:**
 - A transverse lower abdominal incision was made to access the uterus.
 - Both uterine cornua were incised along the medial aspect to expose the cavities.
 - Myometrial edges were approximated and sutured in layers using Vicryl 2-0, ensuring a single unified cavity.
 - Vasopressin was used to minimize blood loss, and care was taken to avoid injury to fallopian tubes.
- Postoperative Protocol: Follow-up imaging (HSG/USG) confirmed cavity unification, and patients were advised cesarean delivery for future pregnancies.

RESULTS :

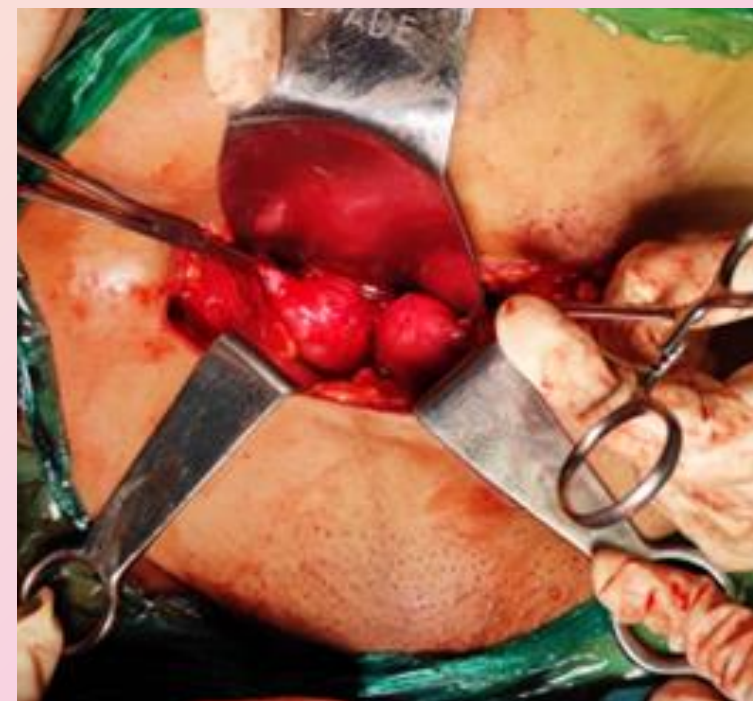
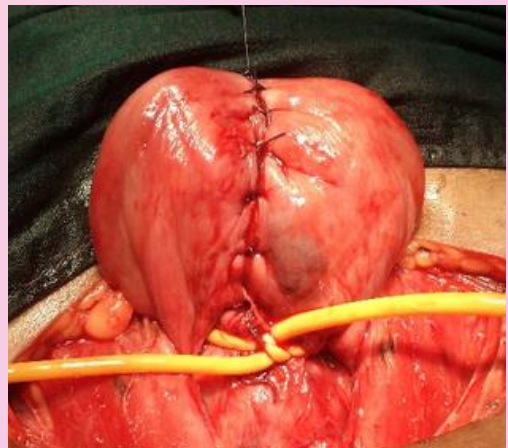
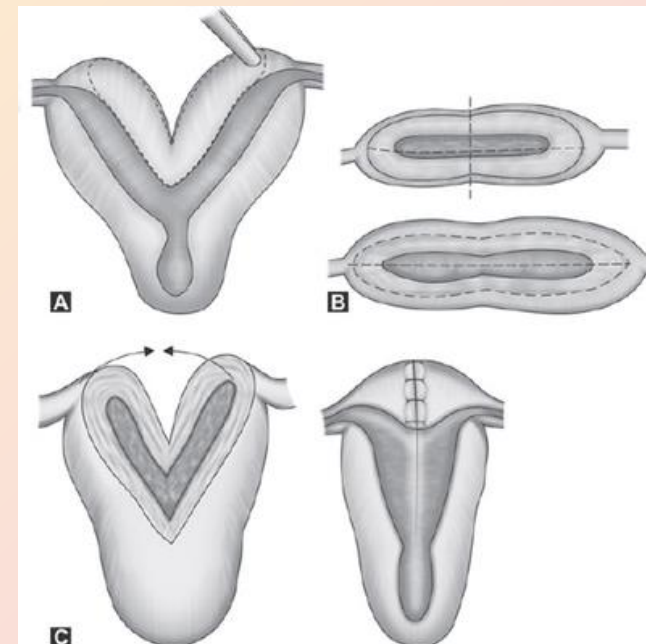
- 1.Case 1:A 28 yr old, MS 10 yrs, Nulligravida, with Primary infertility with Uterine didelphys with right hematometra and hematocolpos.Resolved with metroplasty, confirmed by USG-s/o Single uterine cavity
 - 2.Case 2:A 33 yr old, MS 9 yrs., A2, with Secondary infertility with Bicornuate uterus,bicornuate uterus corrected by metroplasty ; patient achieved full-term pregnancy.
 - 3.Case 3: A 35 yr. Old, MS 8 yrs., A1, with Secondary infertility with Bicornuate uterus.Successful unification of uterine cavity with normal post-metroplasty imaging.
- Post-metroplasty imaging confirmed a single uterine cavity in all cases.
 - Significant improvement in fertility outcomes with minimal complications.

CONCLUSION :

- Metroplasty is a reconstructive surgical procedure that effectively unifies uterine cavities in women with Müllerian anomalies.
- It significantly improves fertility by restoring uterine anatomy, enhancing implantation success, and reducing pregnancy losses.
- Clinical outcomes demonstrate the utility of metroplasty in managing complex uterine anomalies.

CLINICAL SIGNIFICANCE :

- Improved fertility rates and successful term pregnancies after metroplasty.
- Recommended for patients with recurrent pregnancy loss or infertility when other causes are ruled out.
- This procedure bridges a critical gap in reproductive medicine for patients with structural anomalies.



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