

Unicornuate Uterus with Absent Rudimentary Horn - Challenges and Difficulties Encountered During Cesarean Section

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INTRODUCTION

- Embryological malformations of the Mullerian ducts result in congenital uterine anomalies (CUA)
- Women with Unicornuate uterus face higher obstetric complications
- Most defects are likely related to polygenic and multifactorial causes
- Three main mechanisms exist for abnormal uterine development
- Unicornuate uterus can be of four types based on rudimentary horn-status
- We present a case of successful pregnancy in a unicornuate uterus with absent rudimentary horn requiring specialized surgical approach

CASE

- 23-year-old primigravida at 38 weeks gestation
- Unplanned pregnancy with uncomplicated antenatal course
- Persistent breech presentation and small for gestational age (SGA) fetus
- Dating ultrasound at 11 weeks with normal booking investigations and oral glucose test
- Serial ultrasound scans confirming SGA status
- Anomaly scan revealed no congenital defects or cervical shortening
- No previous diagnostic imaging or laparoscopy prior to pregnancy
- Planned elective cesarean section for breech presentation

Management

- Elective cesarean section under spinal anesthesia
- Inverted "L" shape incision needed over the uterus
- Uterus repaired with 2 layers including vertical and horizontal parts
- Postoperative scanning to rule out associated anomalies

Outcome

- Successful delivery of baby
- Right side unicornuate uterus with absent rudimentary horn identified
- Right side tubes and ovary intact with left side ovary and tubes absent
- No other associated Mullerian duct anomalies detected
- *Post-delivery USS scan*
 - No other duct related anomalies
 - No renal or ureteric anomalies

DISCUSSION

- Prevalence of unicornuate uterus is between 2.5-13% of all uterine malformations
- ESHRE/ESGE classification: class U4b describes unicornuate uterus with absent rudimentary horn
- Evaluation methods include 3D scans, hysteroscopy, laparoscopy and MRI
- **Poor pregnancy outcomes associated with unicornuate uterus:**
 - Higher miscarriage rates
 - Premature labor
 - Fetal growth restriction
 - Reduced live birth rates
- **Surgical challenges:**
 - Difficulty identifying lower segment
 - Challenging plane of incision
 - Risk of unexpected bleeding
 - Complicated myometrial repair



Figure 1 – lateral view showing R/s fallopian tube and ovary

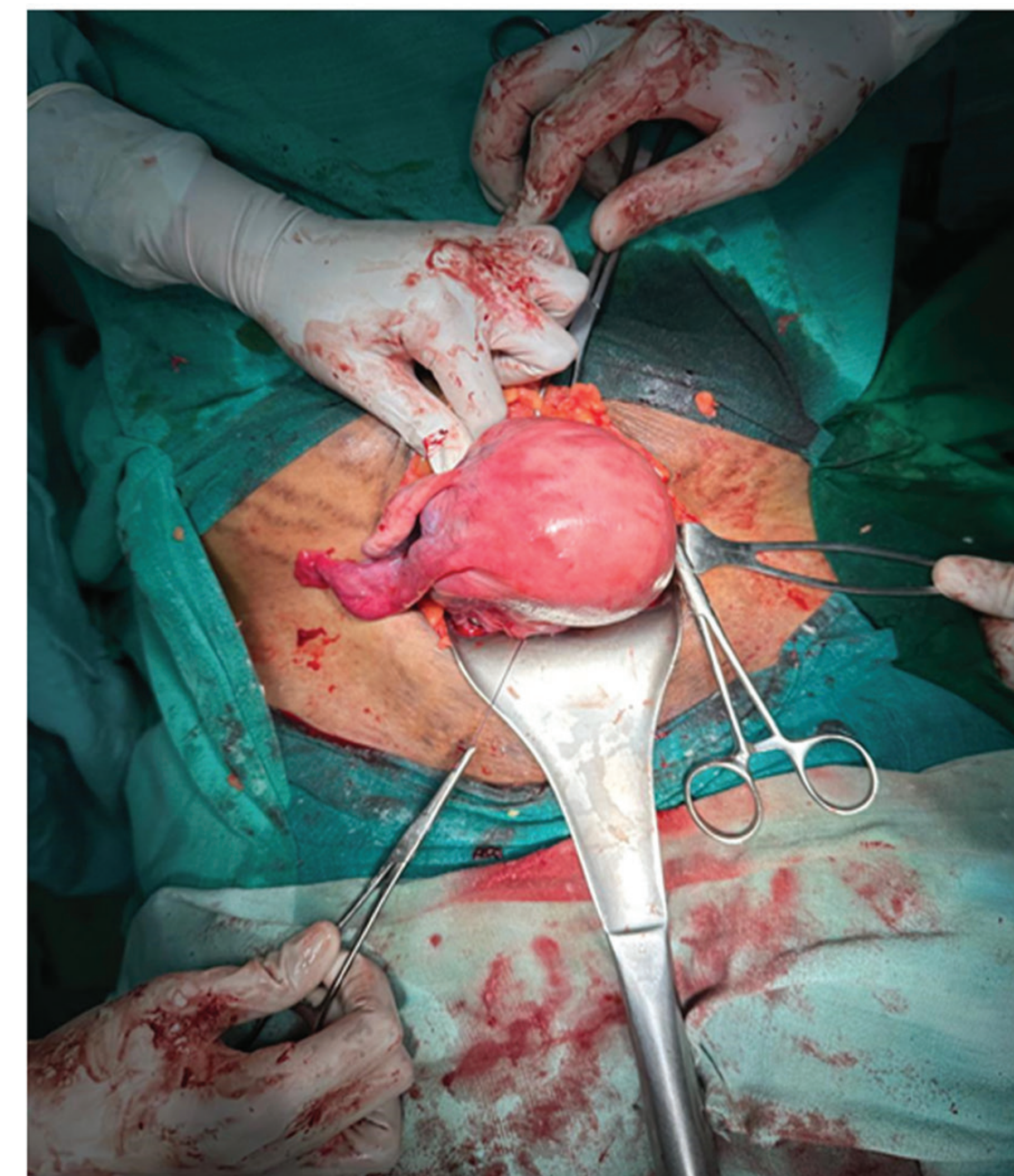


Figure 2 – superior view of R/s fallopian tube, ovary and round ligament.



Figure 3 – superior view of absent L/s ovary, fallopian tube and round ligament

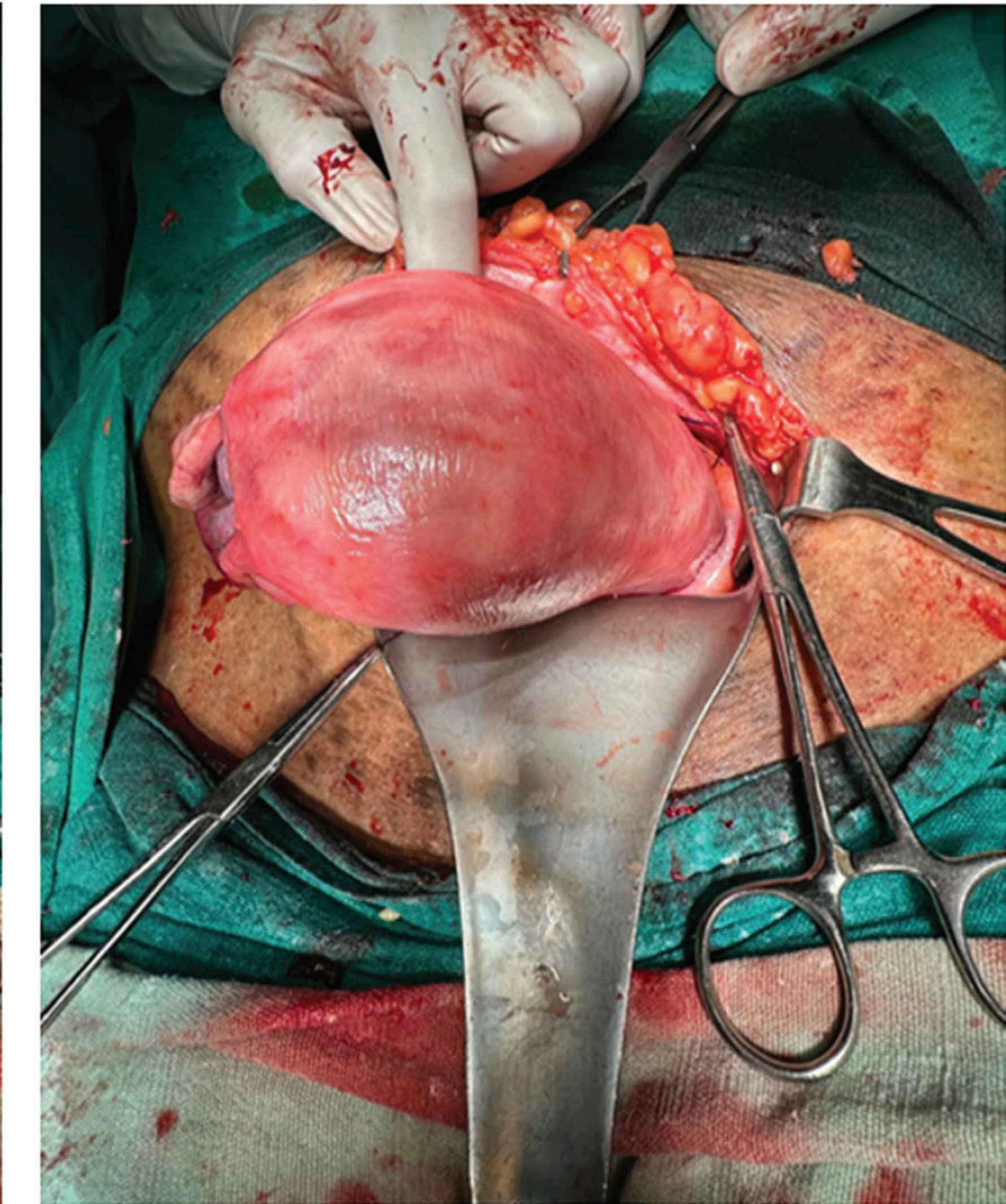


Figure 4 – lateral view showing absent L/s ovary, fallopian tube and round ligament

CONCLUSION

- Unicornuate uterus represents a high-risk pregnancy
- Associated with fetal malposition and growth restriction
- Cesarean section is technically challenging due to altered anatomy
- Careful surgical planning is essential to avoid complications
- Patients are generally not candidates for reconstructive surgery
- Future pregnancies will likely require repeat cesarean section

REFERENCES

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