



Introduction

- The isthmocele is a myometrial defect resembling a pouch on the anterior wall of the uterine isthmus, over a previous cesarean scar
- Defect presents with abundant and ectatic vessels, covered in smooth mucosa and menstrual blood often fills the pouch
- Isthmocele symptoms**
 - Post menstrual spotting
 - Chronic foul-smelling discharge
 - Infertility
 - Sexual discomfort and embarrassment
- Incidence of asymptomatic women diagnosed with isthmocele on TVS 24% -70% and Symptomatic women incidence is 19.4% - 84%
- Post menstrual spotting as most common symptom

Aim and Objective

Aims:

- To present a case series highlighting the clinical features, imaging findings, and management outcomes of women diagnosed with isthmocele following cesarean section .

Objectives:

- To describe the clinical presentations of isthmocele patients.
- To emphasize the role of transvaginal ultrasound and MRI in diagnosis.
- To evaluate the outcomes of surgical interventions, including hysteroscopic assisted laparoscopic repair.
- To assess the impact of isthmocele correction on symptoms and future fertility.

History

	CASE-1	CASE-2	CASE-3	CASE-4
Age	34 years	33 years	32 years	32 years
Complaint	Post menstrual spotting 7-10 days			
Menstrual history	Regular 28-30 days 3-4 days bleeding followed by post menstrual spotting 7-10 days	Regular 28-30 days, 4-5 days bleeding followed by post menstrual spotting 5 days	Regular 28-30 days, 7 days bleeding followed by post menstrual spotting 7-10 days	Regular 28-30 days, 7 days bleeding followed by post menstrual spotting 7-10 days
Obstetric history	PIL1 previous 1 LSCS	PIL1 previous 1 LSCS	PIL1 previous 1 LSCS	PIL1 previous 1 LSCS
Indication for LSCS	Emergency LSCS I/V/O Non progress of labour (7 years)	Elective LSCS I/V/O Cesarean on maternal request (3 years back)	Elective LSCS I/V/O macroscimia	Emergency LSCS I/V/O MSL
Past history	Previous 1 failed laparoscopic <u>isthmocele</u> repair	NS	NS	NS

Imaging and procedure

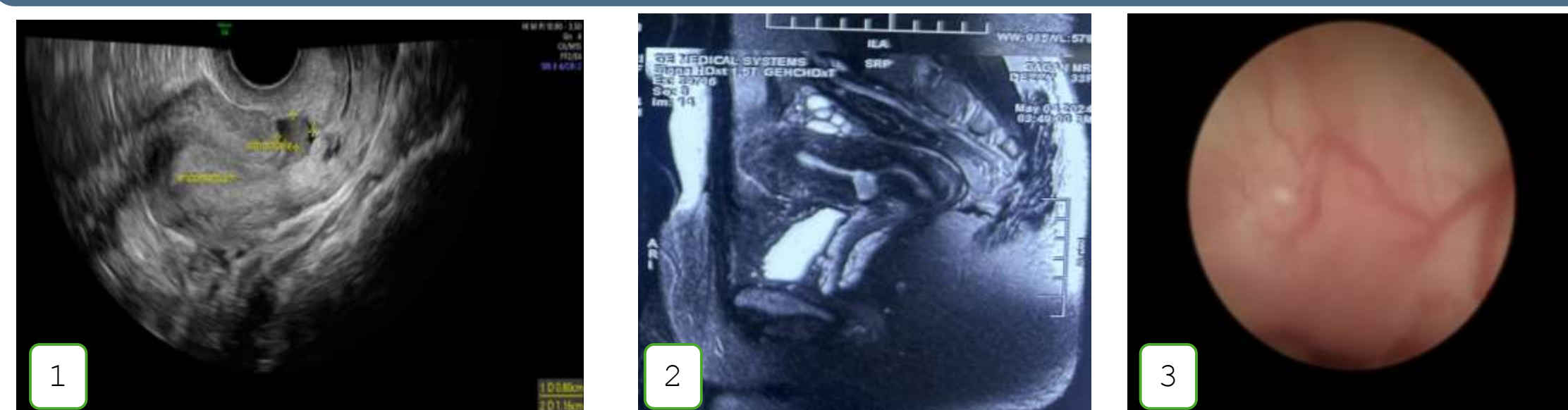


Figure 1.USG showing defect in anterior uterine wall reaching up till serosa seen on MRI (Figure 2.), (Figure 3) Hysteroscopy showed ectatic vessels on anterior wall at the site of isthmocele

Procedure- Hysteroscopy + laparoscopic isthmocele repair

Surgical steps

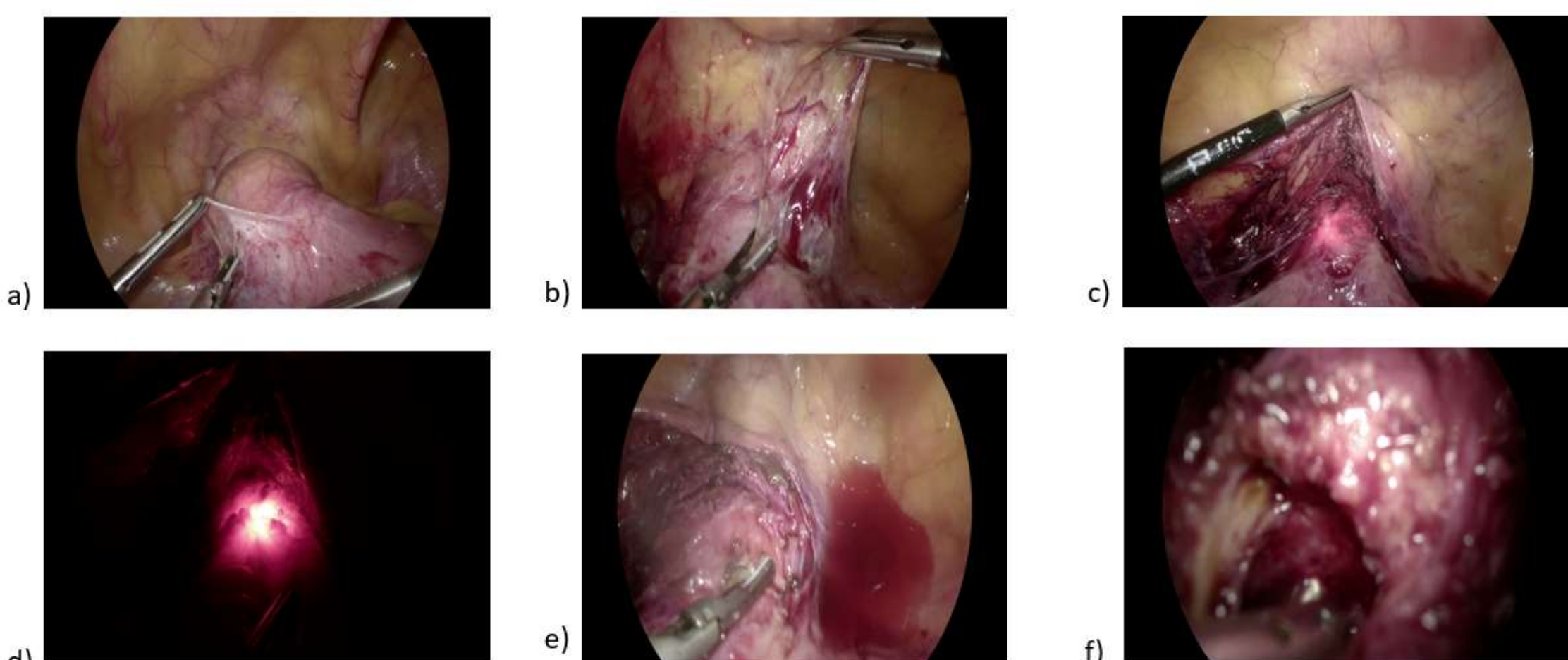


Image a) and b) UV fold of peritoneum dissected image. Image c) and d) Light of hysteroscope seen on the laparoscopy at the site of defect. Image e) dissection of the CSD by harmonic f) Hegars dilator seen in side the uterus

Ultrasound Imaging (RMT)

Preoperative RMT	CASE-1	CASE-2	CASE-3	CASE-4
	RMT 1mm	RMT 2.2mm	RMT 1.9 mm	RMT- 2.1mm
Postoperative RMT (2 months)				
	RMT 7.7 mm	RMT 6.4mm	RMT 8.8 mm	Hematoma of size 1.8* 1.1 cm seen at the surgical site

Surgical steps

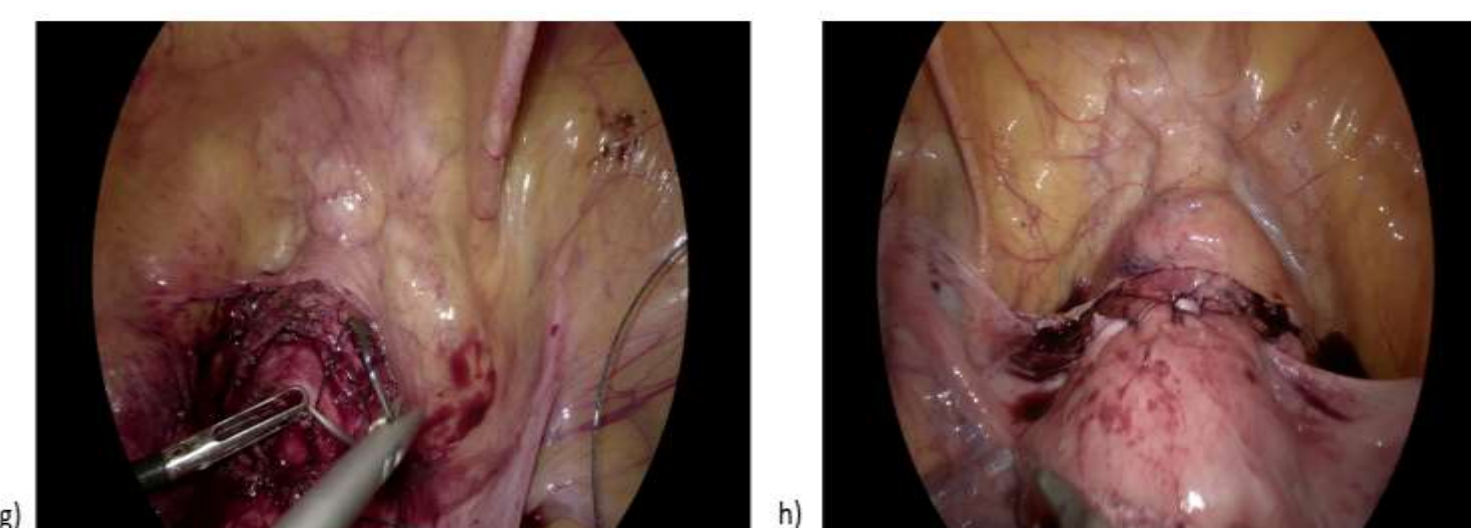


Image g) and h) Suturing done in 2 layers

Results

Intraoperative course

- Mean operating time – 72 ± 5 minutes
- Mean blood loss < 50 ml

Post operative course

- Catheter removed on post operative day 1
- Discharged on Post operative day 2
- OCP given for 6 weeks

Follow up

- After 1st menstrual cycle
- All patient had 90% resolution on symptoms
- Ultrasound TVS done and Residual myometrial thickness calculated. Pre op RMT-1.7mm Post op RMT 7.6 mm

CASE-1 has conceived and her USG at 6 weeks POG



Figure i) shows a G-sac in the cavity with previous scar healed, j) RMT is 6.2mm , k) in 3D sac G sac is seen high above the scar site (CRL 5+2 weeks)

Conclusion

- It is imperative to increase awareness about this condition among clinicians, to develop TVS diagnostic criteria and to develop surgical techniques.
- Laparoscopic repair is the procedure of choice for symptomatic women and those requiring future fertility with no or minimal residual myometrial thickness.

References

- Donnez O et al Gynecological and obstetrical outcomes after laparoscopic repair of a cesarean scar defect in a series of 38 women. Fertility and sterility. 2017 Jan
- Zhang Y et al Feasibility analysis of different surgical methods for uterine cesarean section scar diverticulum. Journal of Obstetrics and Gynaecology Research. 2020