

Minimally invasive trans-anal repair (MITAR) for rectovaginal fistula: A novel technique



Hemanga Bhattacharjee, Mohit Kaushik, Mohammed Motiwala, Durgeshwari Nalamwad, Washim F Khan, Rajinder Parshad

Department of Surgical Disciplines, All India Institute of Medical Sciences, New Delhi, India

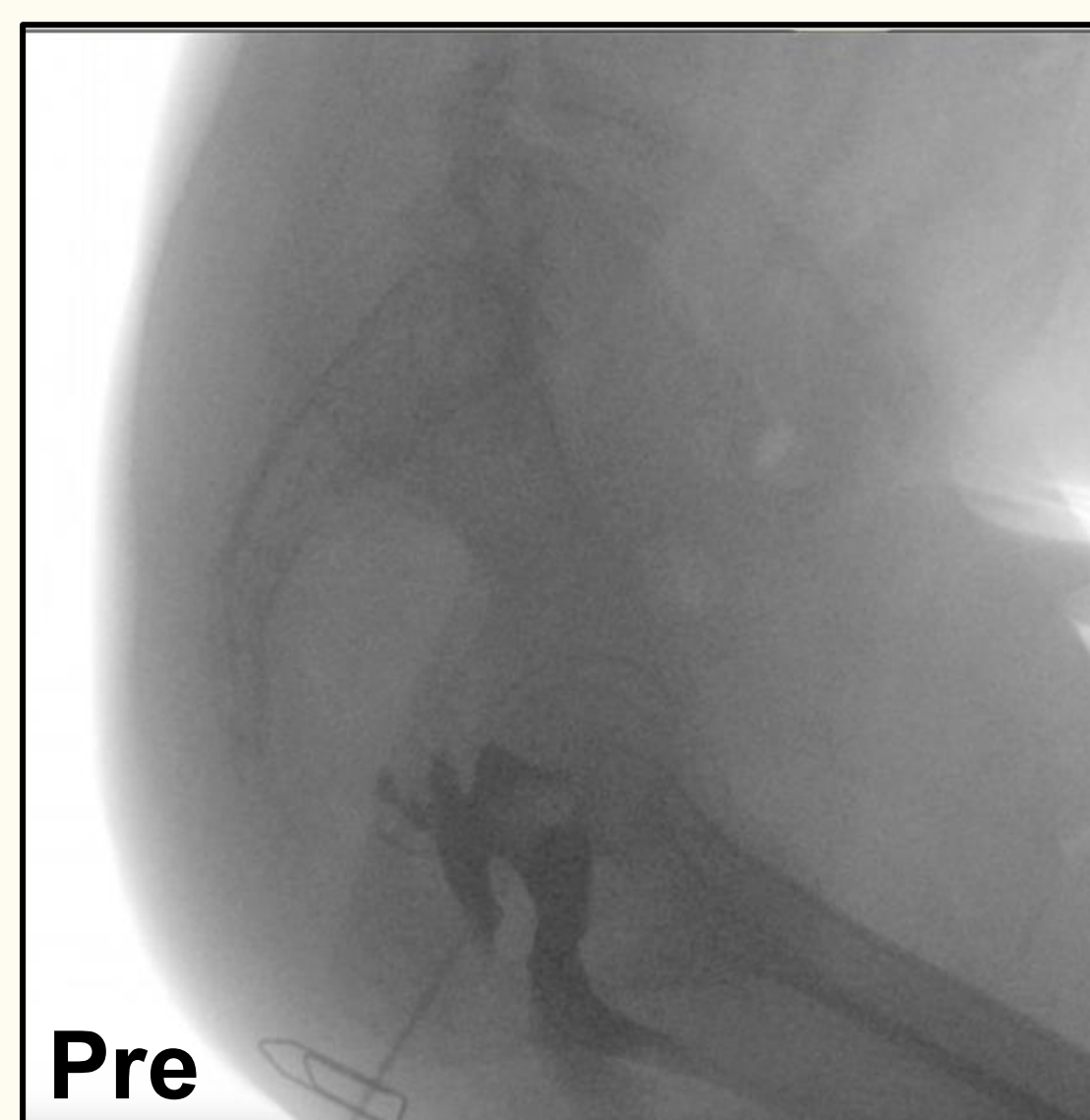


Introduction

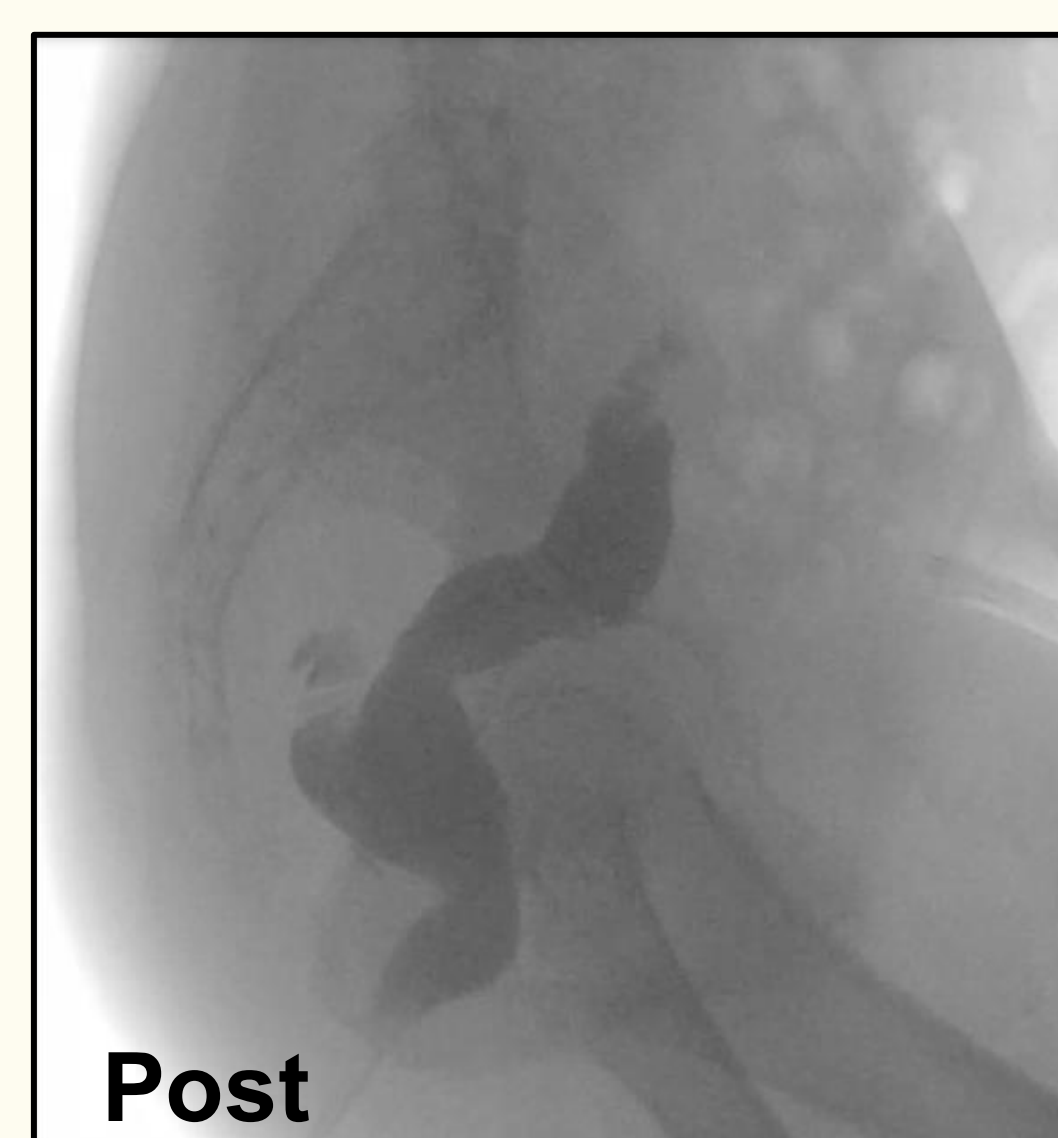
- **Debilitating:** physical, emotional, sexual and psychosocial
- **Surgical challenge:** location, multiple surgeries, radiation, congenital anomalies.
- **Traditional approaches:** transabdominal/ trans-perineal provide inadequate access
- **Novel technique:** especially for mid and lower recto-vaginal fistulas

Follow up

S.no	Primary disease	Previous Surgery	Distance from AV (cm)	Operative duration	Stoma Reversal after MITAR (months)	Follow-up from MITAR (months)
1	Rectocele	Rectocele repair	6	1.5	9	18
2	Carcinoma rectum	Hartmann's procedure	6-8	2	12	33
3	MRKH Syndrome	Vaginoplasty	6-7	2.5	9	36



Pre

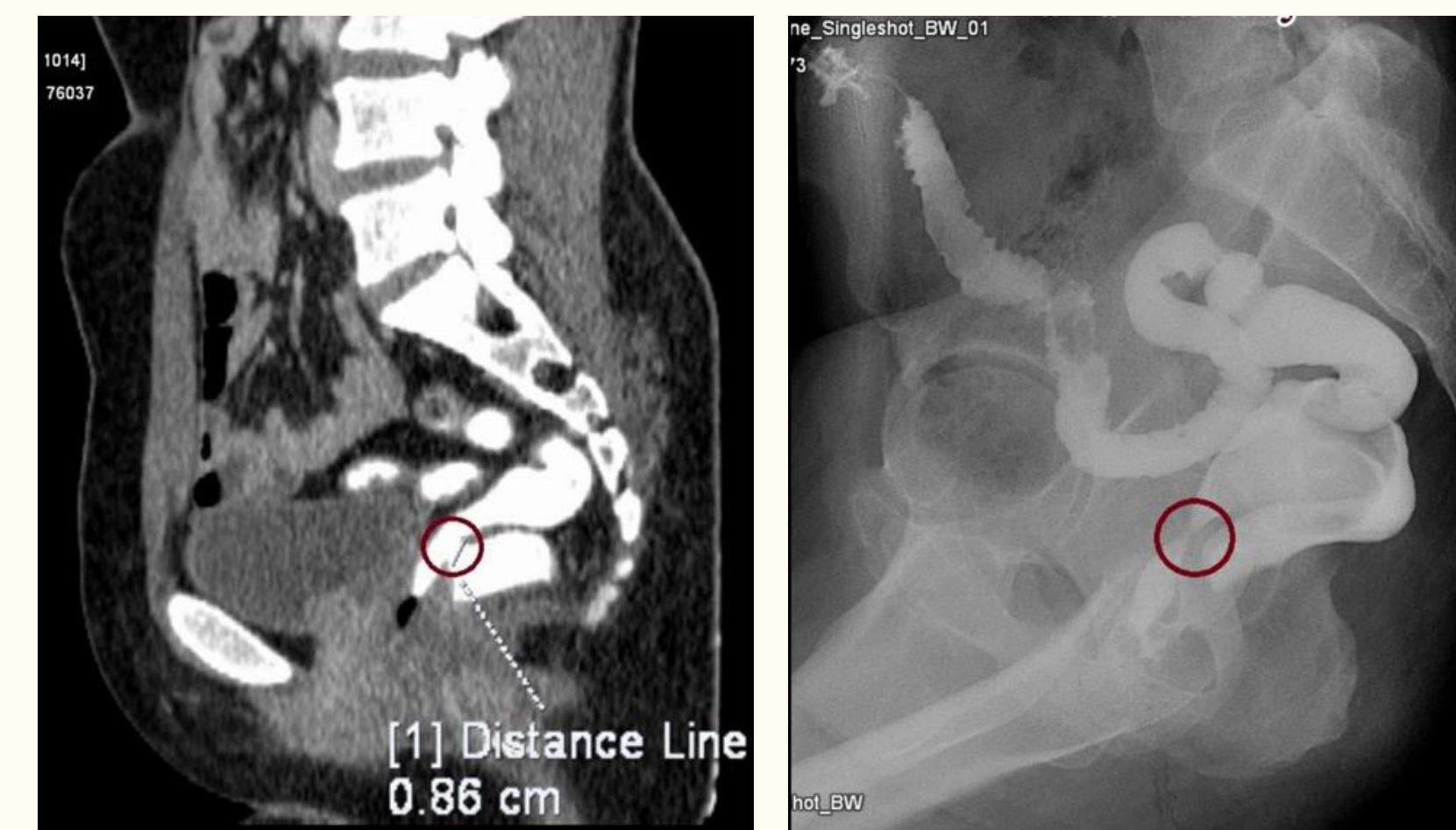


Post

Dye study: 3 months post op: No leak

Methods

- RVF developed following vaginoplasty for a rudimentary vagina, low colorectal anastomosis for carcinoma rectum, and rectocele repair
- The diagnosis of rectovaginal fistula was confirmed by history and radiological delineation of fistula
- Distance from anal verge to fistula was measured by rigid sigmoidoscope
- All three patients already had diversion stoma



Results and Conclusion

- At a mean follow up of 29 months, there has been no recurrence of fistula
- MITAR: a novel minimally invasive technique
 - Direct access
 - HD visualization
 - Precise dissection
 - Minimizes surgical trauma
 - Preserves continence
 - Early recovery
- Future studies with larger cohorts and longer follow-up are essential to better define its long-term efficacy

References

1. Kanehira E, Tanida T, Kamei A, Nakagi M, Iwasaki M Transanal endoscopic microsurgery for surgical repair of rectovesical fistula following radical prostatectomy. Surg Endosc. 2015 Apr;29(4):851–5.
2. D'Ambrosio G, Paganini AM, Guerrieri M, Barchetti L, Lezoche G, Fabiani B, et al. Minimally invasive treatment of rectovaginal fistula. Surg Endosc. 2012 Feb;26(2):546–50.
3. Zeng YX, He YH, Jiang Y, Jia F, Zhao ZT, Wang XF. Minimally invasive endoscopic repair of rectovaginal fistula. World J Gastrointest Surg. 2022 Sept 27;14(9):1049–59.

Operative Details

1. **Preparation:** Prone position
2. **Access:** Trans-anal Gel POINT Path platform (12-14mm of Hg)
3. **Visualise:** The fistula site confirmed under vision.
4. **Dissection:** Rectal and vaginal walls separated and mobilised circumferentially along the RV septum for atleast 1 cm.
5. **Closure:** The walls closed transversely one after the other trans-anally.
6. **Completion:** Leak test done. Stoma closure after 6 months.

