

Minimal Incision Repair of Rectus Abdominis Muscle Diastasis (MIRRAD) as Day-Case Surgery: A Prospective Study

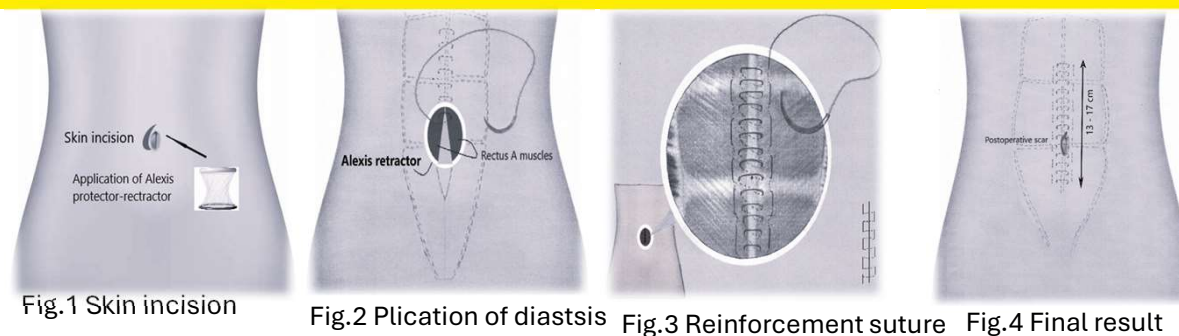
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Aim: Postpartum rectus abdominis diastasis (PP-RAD) is a condition that may cause abdominal wall insufficiency, affecting daily life. When conservative treatments are unsuccessful, surgical intervention may be necessary.

Methods: This study included 33 female patients aged 20-50 years with PP-RAD and an inter-rectus distance (IRD) of ≥ 3 cm. All patients had previously undergone conservative treatment without satisfactory outcomes. Each patient received the MIRRAD procedure as day-case surgery apart from one who stayed overnight due to nausea. Follow-up evaluations were conducted at 4 hours, 1 week, 1 month, and 1 year after surgery.



Results: The average inter-rectus distance (IRD) was 4.4 cm, with a mean diastasis length of 15 cm. Of the 33 patients included, 2 did not attend the 1-year follow-up leaving 31 for final analysis. Of these, 30 had one or more concomitant hernias. The mean operation time was 67 minutes. At the one-year follow-up, 87% of patients were satisfied with the results, and 90% said they would undergo the procedure again if necessary. No surgical site infection was reported, and recovery was generally smooth. Thirty of the 31 patients were discharged within 4 to 6 hours after surgery, while one patient stayed overnight.

Table 1. Baseline data

	N	Minimum	Maximum	Mean	Std. Deviation
Hernia size cm	30	0.4	1.2	0.7	0.21
Suture-line length in cm	31	12.0	20.0	15.1	2.0
Peroperative max. Inter-rectus distance in cm	31	3.0	8.0	4.4	0.9964
Peroperative length of diastasis in cm	31	12	20	15.9	2.6
Operation time in minutes (skin to skin)	31	35	120	67.3	19.7
Valid N	31				

Conclusion: MIRRAD appears to be a safe and effective surgical option for PP-RAD, particularly in cases without significant excess skin. Further studies with larger populations and longer follow-up are needed to confirm these findings and establish standard patient selection criteria.