

**Functional Outcomes and Patient Satisfaction after Abdominoperineal Resection versus Sphincter-Preserving Techniques for Low Rectal Cancer: A Retrospective Single-Centre Study**

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**Abstract**

*Background:* In rectal cancer surgery, maintaining a balance between oncologic control and postoperative quality of life is critical. Sphincter-preserving procedures may offer better functional outcomes, but results vary depending on the technique used.

*Methods:* This retrospective, observational, single-center study included 62 patients with adenocarcinoma of the rectum  $\leq 5$  cm from the anal verge, operated between August 2022 and August 2024. All received standard neo-adjuvant therapy. Patients underwent one of three procedures: abdominoperineal resection, standard coloanal anastomosis, or delayed coloanal anastomosis (Turnbull-Cutait). Functional outcomes were assessed using LARS and St Marks scores at 1, 6, and 12 months postoperatively. Satisfaction was evaluated via telephone interviews.

*Results:* Seventeen patients underwent abdominoperineal resection, 10 received standard coloanal anastomosis, and 35 underwent the delayed technique. Standard anastomosis yielded significantly better continence scores than the Turnbull-Cutait group. Patients with abdominoperineal resection had higher rates of pulmonary complications and prolonged inflammation. At one year, 80% of patients reported satisfaction with the procedure.

*Conclusion:* All techniques can provide high satisfaction, but standard coloanal anastomosis appears to offer superior functional outcomes. Surgical decision-making should be individualized and based on thorough informed consent.

**Keywords:** low rectal cancer, sphincter-preserving surgery, abdominoperineal resection (APR), functional outcomes, patient satisfaction