

### **LAR vs VLAR in Low Rectal Cancer - Postoperative Results - A Single-Center Experience**

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#### **Abstract**

*Background:* The management of rectal cancer recognizes surgical resection as the most important step towards a permanent cure. Respecting the oncological principles, functional preservation represents a priority in achieving an acceptable quality of life for the patient. This study aimed to compare the results after low anterior resection (LAR) versus very low anterior resection (VLAR), in terms of postoperative outcome.

*Methods:* We conducted a retrospective, observational study on a group of 147 patients with LAR or VLAR done for low rectal cancer in the 1st Department of General Surgery of the Emergency County Hospital of Targu Mures, between January 2015 and December 2019. We considered as low rectal cancer tumors located between 5-10 cm from the anal verge and very low those situated less than 5 cm from it. Patients were divided in two groups according to the type of operation. The postoperative evolution was followed.

*Results:* The two groups, LAR with 81 and VLAR with 66 cases, had homogenous distribution regarding patients' demographic and biological parameters and tumor pathological features. A significantly ( $p=0.0223$ ) longer surgical intervention time was reported in VLAR than in LAR procedures. We found no statistically significant differences between LAR and VLAR in terms of associated postoperative morbidity or mortality, neither in hospitalization time.

*Conclusions:* There was no statistical difference in terms of early postoperative outcomes among LAR and VLAR. The most important factor in achieving good oncologic and functional results in low rectal cancer is choosing the adequate, tailored to the case surgical management.

**Key words:** low rectal cancer, sphincter-saving procedure, low anterior rectal resection, very low anterior rectal resection