

Diagnosis and Management of Postoperative Complications in Rectal Cancer Surgery - A Five-Year Retrospective Study in a Single Surgical Unit

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Abstract

Introduction: surgery for rectal cancer often presents multiple tactical and technical challenges due to factors such as the tumor's extent, limited anatomical space, proximity to the anal sphincter complex, and the use of neoadjuvant radiotherapy. These factors can significantly increase the complexity of surgery and the risk of both immediate and delayed complications, which can occur intraoperatively or postoperatively. Objective: the aim of this study was to retrospectively analyze the causes, diagnostic methods, and management of complications in patients who underwent surgery for rectal cancer. Additionally, the study sought to evaluate the impact of these complications on patients' therapeutic outcomes.

Materials and Methods: we conducted a single-center, non-experimental, descriptive retrospective study over a five-year period at a single surgical clinic. The cohort consisted of 157 patients with rectal cancer, with various tumor locations, who underwent either radical or palliative surgical interventions. We analyzed demographic data, clinical and imaging factors, and statistically assessed intraoperative incidents, accidents, and postoperative complications.

Results: complications were not isolated events; many patients experienced multiple associated complications. The overall complication rate was 16.56%, with 15.38% of complications being hemorrhagic incidents, 7.69% involving vascular or nervous plexus injuries, and 13 patients experiencing anastomotic dehiscence. Additionally, 26.9% of patients had complications related to the stoma, and 15.38% developed anastomotic stenosis. The overall mortality rate was 3.82%.

Conclusions: surgeons performing rectal cancer surgeries must undergo extensive training to ensure accurate early diagnosis, effective surgical technique, and the proper management of postoperative complications. This approach is crucial in preventing negative outcomes, including diminished quality of life for patients and higher mortality rates.

Key words: rectal cancer, low anterior resection, abdominoperineal resection, anastomotic leakage, anastomotic stenosis