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# Management of Anastomotic Leakage after Low Anterior Rectal Resections with Total Mesorectal Excision - A Retrospective Study

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**Abstract**

*Background:* This study sought to investigate the diagnostic procedures, treatment modalities, and consequences of anastomotic leakage (AL) in low anterior resection rectal cancer patients.

*Methods:* A retrospective analysis was conducted on 186 patients consecutively admitted and treated in the 1st Department of Surgery in Craiova, between January 2018 and June 2022, all of whom had undergone surgical interventions for adenocarcinoma of the rectum. Among this cohort, 106 patients who had undergone scheduled low and ultralow anterior rectal resections with total mesorectal excision were selected for further analysis. Twenty-four patients were diagnosed with postoperative AL and underwent diverse management strategies based on the severity of their condition.

*Results:* The study revealed an incidence of 22.6% for postoperative AL, with all of them being classified as grade B and C, according to the 2010 International Study Group of Rectal Cancer Classification, which were associated with significant morbidity and mortality. Notably, patients exhibited various comorbidities, including obesity, arterial hypertension, type 2 diabetes mellitus, and kidney failure. The management approach depended on the severity of the clinical presentation and the availability of treatment options. Early diagnosis and conservative management constituted the initial therapeutic strategy for grade B AL, with surgical reintervention or transanal vacuum therapy being used in grade C AL.

*Conclusions:* The incidence and mortality associated with AF following low anterior resections were notably elevated. Grade B AL were successfully managed through conservative treatment, whereas grade C AL required either surgical reintervention for drainage or diversion procedures, or transanal vacuum therapy.

**Key words:** anastomotic leakage, risk factors, rectal surgery, rectal cancer