

Risk Factors and Diagnostic Criteria for Colorectal Anastomotic Leaks

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Background: Anastomotic leakage (AL) after colorectal resection and anastomosis is a major complication with significant morbidity and mortality.

Objective: To identify the risk factors for AL and to identify a standardized diagnostic protocol to reduce delay in diagnosis of AL.

Design: A Systematic Review.

Setting: King Hamad University Hospital, Bahrain.

Method: A Systematic Review of English-language studies was performed. An internet search of full-text articles in three different databases: The Cochrane Library (Controlled Trials Register), Medline (PubMed) and EMBASE from 1990 onwards were reviewed.

Result: Literature review has produced a varying AL rate of 2% to 22%. The major risk factors isolated were advanced age (>65 years), multiple comorbidities/higher ASA grade, low preoperative serum albumin level, steroid use, longer duration of surgery and contamination of operative field. Delay in diagnosing AL was reduced by use of standardized surveillance protocols postoperatively.

Conclusion: Preoperative risk stratification facilitates decision making whether to provide a diverting stoma or not. In addition, a standardized postoperative surveillance decreases delay in the diagnosis of AL, thereby, decreasing morbidity and mortality.