

ABSTRACT NO. 30

THE SUBTLE PRESENTATION OF POST COLECTOMY ANASTOMOTIC LEAKS

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Introduction: An anastomotic leak after colorectal surgery is associated with significant morbidity and decreased survival. Traditional signs and symptoms of a leak have reported to be fever, elevated wbc, abdominal pain, ileus, and distention. The aim of the current study was to identify the presentation of patients with clinical anastomotic leaks.

Methods: The records of all patients undergoing restorative resection for colorectal disease from 1/2000 - 11/2005 at a university affiliated VAMC were reviewed. Patient demographics, clinical events, and laboratory parameters were recorded. Statistical analysis was performed using ANOVA and regression.

Results: 311 patients, mean age 65 ± 1 years (range 31-89 years) were included. An anastomotic leak was identified in 25 patients (8%). A leak was clinically suspected and the diagnosis confirmed at a mean of 10 ± 1 days (range 4 -28) postop. Acute respiratory and cardiac problems occurred early in the postoperative course and were usually the first signs and symptoms of a potential leak (average 4-5 days prior to diagnosis). Significantly more respiratory and cardiac events occurred in patients with an anastomotic leak ($p < 0.001$). There was a statistically significant rise in the BUN levels beginning two days before the leak was diagnosed (15.5 ± 2.4 g/dl to 22.1 ± 2.2 ; $p < 0.001$). Elevations of the wbc or temperature were not an early clinical finding. 56% of patients with a leak reported flatus and 64% reported bowel movements on average 6 and 4 days respectively prior to leak diagnosis. The timing of these events was not different compared to patients without a leak. In patients with a leak, peritonitis, abdominal distension and/or wound dehiscence were a late finding occurring on the day the leak was diagnosed.

Conclusion: The clinical presentation of anastomotic leak is subtle and is often cardiopulmonary. A rise in the BUN may also be early predictor of a leak. Return of bowel function prior to diagnosis is common in patients with an anastomotic leak.