

Title of the Abstract: Anastomotic Leak After Left Sided Colonic Resections: Incidence and Analysis of Risk Factors

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Objectives: This study was aimed at determining the incidence of anastomotic leak following left colonic resections and describing the risk factors associated with the same.

Methods: It was an observational study with prospective and retrospective components. All patients, irrespective of age and etiology, undergoing resection and anastomosis on the left colon (left hemicolectomy, sigmoid colectomy and high anterior resection), where anastomosis was above the level of peritoneal reflection were included. The primary outcome was anastomotic leak. The risk factors studied included those related to patient specific factors, intra operative factors and technical factors of anastomosis.

Results: A total of 22 patients were included prospectively and 108 patients were included retrospectively. The rate of anastomotic leak in our study was 12.3% (n = 16/130). Preoperative Hb < 10 g/dl was the only statistically significant risk factor associated with increased leak rate (p = 0.029). Other risk factors associated with increased leak rate were epidural anaesthesia, preoperative hypoalbuminemia (Albumin < 3.5 g/dl) and handsewn anastomosis. But these risk factors were not statistically significant. The overall mortality rate following left sided colorectal resections was 2.3% (n = 2/130) and the mortality rate among patients who had anastomotic leak was 18.75% (n = 2/16)

Conclusion: From the results of this study, it is concluded that risk of anastomotic leak is not related to operative factors alone. Non-surgical factors are also associated with anastomotic leak. This study showed that patients with anaemia are at increased risk for anastomotic leak.

Keywords: Anastomotic Leak, Left Colonic Resections