Outcome of Anastomosis of Mechanically Prepared vs Mechanically Unprepared Bowel in Laparoscopic Anterior Resection in Surgical Units of Teaching Hospital Karapitiya ,Sri Lanka

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Abstract : Introduction: The limited literature supporting the utilization of mechanical bowel preparation (MBP) for patients undergoing laparoscopic anterior resection (LAR) remains a notable issue. This study was conducted to examine the clinical consequences of anastomosis in colorectal surgery with MBP compared to cases where MBP was not utilized (no-MBP) in the context of LAR. Methods: This was a retrospective comparative study conducted in the professorial surgical wards of the teaching hospital karapitiya (THK). Colorectal cancer patients(n=306) participated in the study, including 151 MBP patients and 155 no-MBP patients, where the postoperative complications and mortality rates were compared. Results: The anastomotic leakage rate was 2.6%(n=4) in the no-MBP group and 6.0%(n=9) in the MBP group (p=0.143). The postoperative paralytic ileus rate was 18.5%(n=28) and 5.8%(n=9) in the MBP group and no-MBP group, respectively, displaying a statistically significant difference (p=0.001). Wound infection, pneumonia, urinary tract infection, and cardiac complication rates also were higher in the MBP group. The overall mortality rate was 1.3%(n=3) in the no-MBP group and 2.0%(n=2) in the MBP group. Conclusions: The evidence concludes that MBP increases post-operative complications. Therefore, prophylactic MBP in LAR has not been proven to benefit patients. However, further research is necessary to understand the comparative effects of MBP versus no preparation comprehensively.

Keywords : MBP, anastomosis, LAR, paralytic ileus

Conference Title : ICAGPS 2023 : International Conference on Advancements in General and Pediatric Surgery **Conference Location :** Tokyo, Japan

Conference Dates : November 13-14, 2023

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