Figure 1. Nomogram to estimate the probability of adequate bowel preparation), including hospitalization, diabetes, constipation, history of colonoscopy and indication of colonoscopy. The model had high levels of discrimination (AUC=0.75) and excellent calibration. The Hosmer–Lemeshow test showed no statistical significance in both cohorts. Overall performance of the updated model was better than the previous ones available.

Conclusions Updated inadequate bowel preparation nomograms were developed and validated. The inclusion of practicability variables in the new model can help doctors to identify those at most risk of inadequate bowel preparation easily.

IDDF2021-ABS-0117 PREVALENCE OF POUCHITIS IN BOTH ULCERATIVE COLITIS AND FAMILIAL ADENOMATOUS POLYPOSIS; A SYSTEMATIC REVIEW AND META-ANALYSIS

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Background Pouchitis is a clinically significant complication of ileal pouch–anal anastomosis (IPAA) with its prevalence varying in the literature. Pouchitis is thought to occur more commonly in patients with Ulcerative Colitis (UC) than Familial Adenomatous Polyposis (FAP). We conducted a systematic review with a meta-analysis of all published literature to report the prevalence of acute and chronic pouchitis in UC and FAP.

Methods A PRISMA meta-analysis was conducted by searching the Embase, Embase classic and Pubmed databases between 1970–2021 to identify studies that reported the incidence of pouchitis. We combined the proportion of patients with pouchitis in each study to give a pooled prevalence. We then performed a random-effects model in order to pool the data to provide an estimate of the prevalence of pouchitis. Heterogeneity was assessed using the I^2 statistic. All statistics were carried out using R with the package ‘meta’.

Results In total, 4709 abstracts were screened with 26 full papers and conference abstracts meeting the inclusion criteria. Our analysis showed that in patients with UC; the prevalence of acute pouchitis was 0.18 (95%CI: 0.15-0.22) with a significant heterogeneity of $I^2 = 89\%$ $P < 0.01$ (IDDF2021-ABS-0117 Figure 1). The prevalence of chronic pouchitis in UC was found to be 0.13 (95% CI: 0.10-0.18) with a significant

Abstract IDDF2021-ABS-0117 Figure 2 Forest plot of chronic pouchitis prevalence in UC studies

Abstract IDDF2021-ABS-0117 Figure 3 Forest plot of acute and chronic pouchitis prevalence in FAP studies

Abstract IDDF2021-ABS-0117 Figure 1 Forest plot of acute pouchitis prevalence in UC studies

heterogeneity of $I^2=94\%$ $P<0.01$ (IDDF2021-ABS-0117 Figure 2). In FAP the total prevalence of pouchitis was found to be 0.02 (95% CI: 0.00-0.14) with a significant heterogeneity of $I^2 = 69\%$, $P<0.01$ (IDDF2021-ABS-0117 Figure 3). The odds ratio of total pouchitis in UC compared with FAP patients was 3.78 (CI: 2.76-5.34, $p<0.001$).

Conclusions Our findings support the consensus that the prevalence of pouchitis is higher in UC than in FAP and higher in acute than in chronic. More significantly, our findings suggest that the true prevalence of pouchitis is higher than commonly reported in the literature. This literature may help counsel patients prior to undergoing restorative proctocolectomy, especially in those with ulcerative colitis who have often had to live for many years with the consequences of colonic mucosal inflammation.

IDDF2021-ABS-0119

THERMAL ABLATION OF MUCOSAL DEFECT MARGINS AFTER ENDOSCOPIC MUCOSAL RESECTION REDUCES ADENOMA RECURRENCE: A SYSTEMATIC REVIEW AND META-ANALYSIS

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Background Resection of colorectal lesions larger than 20mm is complex and requires advanced endoscopic techniques such as endoscopic mucosal resection (EMR). Adenoma recurrence is a limiting factor especially due to micro-adenomas at the margin of the EMR mucosal defect site. This systematic review and meta-analysis aimed to determine the efficacy of thermal ablation of mucosal defect margins after EMR in reducing adenoma recurrence.

Methods A comprehensive, computerized literature search from the PubMed Central, Embase, Cochrane Library, and OVID was performed with the following search terms: coagulation, mucosal defect margin, endoscopic mucosal resection, and adenoma recurrence. Three cohort studies were selected and validated using the Newcastle-Ottawa criteria. Pooled data were combined under a random-effects model. The Cochrane Review Manager Software version 5.3 was used for all analyses.

Results Three cohort studies comprising of 361 patients were analyzed. In the random-effects model, the pooled odds ratio (OR) of adenoma recurrence was 0.22 (95% CI 0.13-0.39; $I^2 = 0\%$) (IDDF2021-ABS-0119, Figure 1). The pooled data of the three studies showed a trend towards a beneficial effect of thermal ablation of mucosal defect post-endoscopic mucosal resection in reducing the risk of adenoma recurrence.

Conclusions Thermal ablation of the mucosal defect margins was shown to have a decreased risk of adenoma recurrence after endoscopic mucosal resection. However, further

Abstract IDDF2021-ABS-0119 Figure 1 Forrest plot

prospective randomized studies are recommended to confirm this relationship.

IDDF2021-ABS-0120

FACE-TO-FACE INSTRUCTION AND PERSONALIZED BOWEL PREPARATION REGIMENS IMPROVE QUALITY OF PREPARATION FOR INPATIENT COLONOSCOPY: A RANDOMIZED CONTROLLED TRIAL

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Background Poor bowel preparation (BP) is commonly observed in inpatients undergoing colonoscopy, particularly those with a higher risk for inadequate BP. The objective of this study was to determine whether face-to-face instruction (FFI) and personalized BP regimens could improve the quality of BP for inpatient colonoscopy procedures.

Methods In this endoscopist-blinded, randomized controlled trial, 320 inpatients were enrolled and randomly allocated at a ratio of 1:1 to the control and intervention groups. The intervention group received FFI and personalized BP regimes, while the control group received the standard education and BP regimes. The primary outcome was an adequate BP rate. Secondary outcomes included rates of procedure-related adverse events, incorrect diet restriction and laxative intake, quality of sleep before colonoscopy and willingness to repeat the BP.

Results Demographic characteristics were comparable between the control and intervention groups. Notably, the adequate BP rate in the FFI group was significantly higher compared to the control group [intention-to-treat (ITT) analysis: 70.0% vs. 51.3%, $P < 0.001$; per-protocol (PP) analysis: 79.4% vs. 58.6%, $P < 0.001$; (IDDF2021-ABS-0120 Figure 1. The rate of adequate BP between the FFI and control groups for inpatients following ITT and PP analyses). Bowel cleanliness was significantly improved in response to the intervention in high-risk inpatients (ITT analysis: 65% vs. 44.6%, $P = 0.004$; PP analysis: 73.0% vs. 51.7%, $P = 0.004$) and in low-risk inpatients (ITT analysis: 80% vs. 62.7%, $P = 0.037$; PP analysis: 92.3% vs. 69.8% $P = 0.003$). There were no significant

Abstract IDDF2021-ABS-0120 Figure 1