allows optimization of daily pathologist workload to meet case turn-around-time promptly for urgent cases, improving cancer patient management, paving the way for the application of computational pathology in the workflow of a histopathology laboratory.

IDDF2021-ABS-0105

PREVALENCE OF 'POUCH FAILURE' OF THE ILEOANAL POUCH IN ULCERATIVE COLITIS: A SYSTEMATIC REVIEW AND META-ANALYSIS

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10.1136/gutjnl-2021-IDDF.138

Background The ileoanal pouch (IPAA) provides patients with ulcerative colitis (UC) that has not responded to medical therapy an option to retain bowel continuity and defecate without the need for a long-term stoma. Despite good functional outcomes, some pouches fail, requiring permanent diversion, pouchectomy or a redo pouch. The incidence of pouch failure ranges between 1% -15% in the literature. Understanding the incidence of pouch failure is vital in counselling patients considering this operation. Therefore, we conducted a systematic review and meta-analysis aiming to define the prevalence of pouch failure in patients with UC who have undergone IPAA using population-based studies.

Methods We searched Embase, Embase classic and PubMed from 1978- 31st of May 2021 to identify cross-sectional studies that reported the prevalence of pouch failure in adults (≥ 18 years of age) who underwent IPAA for UC. We hand-searched the references from eligible studies and the proceedings from Inflammatory bowel disease conferences. We combined the proportion of patients with pouch failure in each study to give a pooled prevalence for each study. We performed a random-effects model in order to pool the data to provide an estimate of the prevalence of pouch failure. Heterogeneity was assessed using the I^2 statistic.

Results Thirty-three studies comprising 29,153 patients were analysed. After a five-year follow-up period, the prevalence of pouch failure was 4% (95%CI 2%-6%) (IDDF2021-ABS-0105 Figure 1). Between 5-10 years of follow-up, the prevalence was 4% (95%CI 3%-7%) (IDDF2021-ABS-0105 Figure 2). This increased to 11% (95%CI 7%-16%) with over 10 years

Abstract IDDF2021-ABS-0105 Figure 1

Abstract IDDF2021-ABS-0105 Figure 2

Abstract IDDF2021-ABS-0105 Figure 3

Abstract IDDF2021-ABS-0105 Figure 4

of follow-up (IDDF2021-ABS-0105 Figure 3). The overall prevalence of pouch failure was 5% (95%CI 4%-6%) (IDDF2021-ABS-0105 Figure 4).

Conclusions The prevalence of pouch failure in patients over the age of 18 who have undergone restorative proctocolectomy in UC is 11% after a 10-year follow-up. These data are important for counselling patients considering this operation. Importantly, for those patients with UC being considered for a pouch, their disease course has often resulted in both physical and psychological morbidity and hence providing accurate expectations for these patients is vital.

IDDF2021-ABS-0109

OBG-LIKE ATPASE 1 (OLA1) CONTRIBUTES TO GASTRIC CANCER PROGRESSION AND CAN BE A NOVEL THERAPEUTIC TARGET

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10.1136/gutjnl-2021-IDDF.139

Background Obg-like ATPase 1 (OLA1) is a member of the GTPase protein family but utilizes ATP over GTP in humans. OLA1 has been reported to be involved in lung and breast cancer progression, however, it remains unclear whether OLA1 plays a critical role in gastric cancer.

Methods TCGA and GEO datasets data were collected to identify differential gene expression profiles in gastric cancer patient samples. Western blot and real-time polymerase chain reaction were performed to evaluate OLA1 expression in gastric cancer cells and normal gastric epithelium. Cell count Kit-8, Propidium iodide staining assay, colony formation assay, wound-healing and transwell assays were applied to analyze the effects of OLA1 on gastric cancer cell proliferation and metastasis in vitro. Moreover, the Subcutaneous gastric cancer