## P191

Systematic review and meta-analysis: Patient-reported outcomes and endoscopic appearance in ulcerative colitis

N. Narula[1]*, A.-A. Alshahrani[1], Y. Yuan[1], W. Reinisch[2], J.-F. Colombel[3]
[1]*McMaster University, Gastroenterology, Hamilton, ON, Canada,* [2]*McMaster University, Gastroenterology, Hamilton, Canada,* [3]*Mount Sinai Hospital, Gastroenterology, New York, USA*

Background: To evaluate the association of the patient-reported outcomes rectal bleeding and stool frequency with mucosal healing in ulcerative colitis (UC).

Methods: A systematic review of studies reporting the association of patient-reported outcomes and mucosal healing was conducted. Diagnostic accuracy meta-analysis was performed using the hierarchical bivariate method.

Results: Five studies were included with a total of 2132 participants. For rectal bleeding subscore of 0, the pooled sensitivity was 81% (95% confidence interval (CI): 73–86%), specificity 68% (95% CI: 61–75%), positive likelihood ratio (LR) 2.5 (95% CI: 2.2–3.0), and negative LR 0.28 (95% CI 0.22–0.37). For stool frequency subscore of 0, the pooled sensitivity was 40% (95% CI: 25–58%), specificity 93% (95% CI: 86–97%), positive LR 6.0 (95% CI: 3.7–9.7), and negative LR 0.64 (95% CI 0.50–0.82). For combined rectal bleeding and stool frequency subscores of 0, the pooled sensitivity was 36% (95% CI: 22–54%), specificity 96% (95% CI: 91–98%), positive LR 8.4 (95% CI: 5.5–12.8), and negative LR 0.66 (95% CI 0.53–0.84).
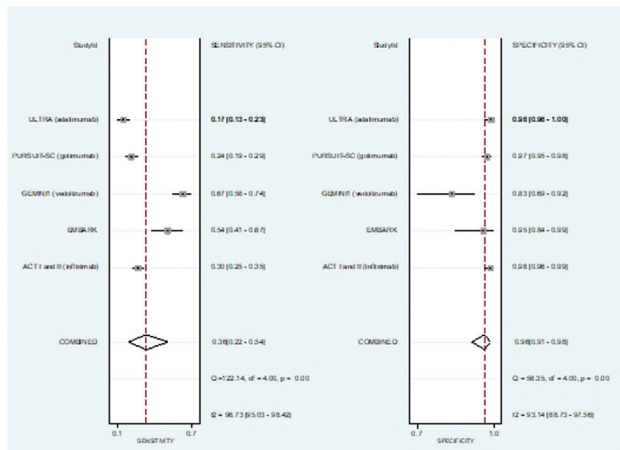
Forest plots of coupled sensitivity and specificity of combined rectal bleeding and stool frequency subscores = 0 for mucosal healing

Conclusions: UC patients with normal rectal bleeding and stool frequency subscores likely have attained mucosal healing. Rectal bleeding is often absent in those with mucosal healing. Normal stool frequency predicts mucosal healing, but often remains abnormal in patients despite mucosal healing.

P192

Extreme body mass indices are frequent in inflammatory bowel disease patients and are associated with higher disease activity in Crohn`s disease, but not in ulcerative colitis: a cross-sectional analysis of the Swiss IBD cohort study

T. Greuter[1], F. Porchet[1], N. Fournier[2], L. Biedermann[1], P. Schreiner[1], M. Scharl[1], A. Schoepfer[3], E. Safroneeva[4], A. Straumann[1], G. Rogler[1], S. Vavricka[1]*, on behalf of the Swiss IBD Cohort Study Group
[1]*University Hospital Zurich, Division of Gastroenterology and Hepatology, Zurich, Switzerland,* [2]*University Hospital Lausanne - CHUV, Institute of Social and Preventive Medicine, Lausanne, Switzerland,* [3]*University Hospital Lausanne, Division of Gastroenterology and Hepatology, Lausanne, Switzerland,* [4]*University of Bern, Institute of Social and Preventive Medicine, Bern, Switzerland*

Background: Obesity is a common phenomenon among patients with inflammatory bowel disease (IBD). On the other hand, malabsorption can result in a severe weight loss. The influence of extremes of body weight (BMI <17.5 and ≥30kg/m2) on disease course has yet to be determined.

Methods: Data on all IBD patients included in the nation-wide Swiss IBD cohort study were analysed in a cross-sectional manner. Patients were classified into 3 different groups based on body mass index (BMI): group 1 BMI <17.5, anorexia; group 2 BMI 18.5–24.9, normal weight; group 3 BMI ≥30 kg/m2, obesity. The following outcome parameters were assessed: current disease activity (Crohn`s disease (CD): Crohn`s Disease Activity Index (CDAI), ulcerative colitis (UC): modified Truelove and Witts activity index), disease location, disease behaviour, quality of life (IBDQoL), and presence of extraintestinal manifestations (EIM) and complications (including fistula, stenosis, abscesses). 2-by-2 comparison was performed for extreme BMI groups vs. normal weight group.

Results: We included a total of 2117 patients (1229 CD, 888 UC/IC): 67 patients had a BMI <17.5 (3.2%), 1725 a BMI 18.5–24.9 (81.5%), and 325 a BMI ≥30 kg/m² (15.4%). Compared with normal weight controls, anorexic patients were more often females (74.6 vs. 54.9%, $p = 0.001$) and more often had CD (86.6 vs. 56.6%, $p < 0.001$), while obese patients were older at diagnosis (median 32 vs. 26 years, $p < 0.001$). Anorexic and obese CD patients both had higher median CDAI scores (44 and 33 vs. 20, $p < 0.001$ and $p = 0.001$), with obese patients also showing increased stool frequency compared with normal weight controls (median soft stools 8 vs. 4/week, $p = 0.001$). No differences were seen regarding disease behaviour/location and The presence of fistula or abscesses. EIM were more frequent in obese CD patients (63.4 vs. 54.4%, $p = 0.020$), while anaemia (34.5 vs. 21.6%, $p = 0.022$) was more often seen in anorexic patients compared with normal weight patients. Faecal calprotectin was higher in anorexic (401 vs. 105 µg/g, $p = 0.023$), but not obese patients. Quality of life was globally affected in anorexic patients (IBDQoL 161 vs. 185, $p < 0.001$), while in obese patients this effect was only partially seen (decrease in the systemic and social, but not global score). In UC patients, no difference in disease activity was seen. Of note, anaemia was not more frequent in anorexic vs. normal weight patients, and quality of life was not decreased. Primary sclerosing cholangitis was less frequently reported in obese patients (0.8 vs. 5.5%, $p = 0.014$).

Conclusions: In a large IBD cohort, prevalence of anorexia and obesity was 3.2 and 15.4%. Association between BMI and disease activity as well as quality of life was seen in CD, but not UC patients. These patients require close attention.