P336 Safety of anti-TNF treatment in older IBD patients: a systematic review and meta-analysis
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Background: Anti-tumour necrosis factor (Anti-TNF) therapy is effective for both inducing and maintaining remission in IBD patients. Recent meta-analyses have demonstrated their safety in the general IBD population. However, little is reported about the safety of these drugs in elderly patients. Therefore, we aimed to investigate the safety of management of IBD in elderly patients using anti-TNF treatment by systematic review and meta-analysis of available data.

Methods: A literature search was conducted for papers and conference proceedings through November 2016 regarding elderly IBD patients and anti-TNF therapy. All studies were appraised using the adapted Newcastle-Ottawa Scale (NOS), which contains 9 criteria for cohort studies and is adapted to 6 criteria for case series and case reports. Three reviewers independently extracted data on anti-TNF-exposed older and younger patients, with number of serious infections, death during follow-up and cessation of therapy due to adverse events as outcomes of interest. Poisson regression was used to compare the occurrence of outcomes of interest per patient year follow up between older and younger IBD patients.

Results: From 454 found titles, four papers and 5 conference abstracts were included, totalling 1276 patients: 470 older and 806 younger patients. Data on combined steroid use was provided in 2 papers, data on IM combo-therapy in 5 papers. Papers used either 60 years or 65 years as cut off.

The rate ratio for serious infections was similar between older and younger IBD patients (2.1, p=0.084) and was not influenced by IM use (rate ratio 2.8, p=0.054). However, when steroid use was added to the model, the rate ratio for serious infections was 2.35 (p=0.04). Detailed aspects of our analysis are reported in the table.

Conclusions: Despite NAFLD is an increasing problem in IBD, it seems to be correlated to the presence of metabolic syndrome rather than to IBD characteristics.

P337 Efficacy of intravenous cyclosporine in fulminant steroid-refractory ulcerative colitis with massive bleeding: a retrospective, observational study
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Background: Intravenous cyclosporine (ivCys) is used for rescue therapy for steroid-refractory ulcerative colitis (UC), as well as anti-TNF-α antibodies. For fulminant steroid-refractory UC with massive bleeding, colectomy is usually recommended. However, the efficacy and limitation of ivCys for these patients remains unclear. This study aimed to clarify the short- and long-term outcomes, limitations, and safety of ivCys for fulminant steroid-refractory UC with massive bleeding.

Methods: We retrospectively reviewed the outcome of patients with steroid-refractory fulminant UC with massive bleeding treated with ivCys between 2009 and 2015 in a single tertiary centre. At the starting of ivCys, the patients did not consent to colectomy, their vital signs were maintained, and they could not take medicine orally for severe abdominal pain. IBD surgeons waited for 24 hours for an emergency operation. Administration of ivCys was performed for 2 weeks (blood concentrations, 400–600 ng/ml), and was discontinued when symptoms were exacerbated or vital signs of shock that did not recover with transfusion were observed. In patients who were determined to be responsive on the 14th day, ivCys was discontinued at that time. The short-term outcome was evaluated by clinical efficacy (partial-Mayo score) and the long-term outcome was calculated using Kaplan–Meier method. Cox regression analysis was performed to identify predictors of colectomy.

Results: The study population comprised 31 patients with fulminant steroid-refractory ulcerative colitis with massive bleeding treated with ivCys. The median baseline partial-Mayo score was 8.6. Within 2 weeks of ivCys treatment, 11 (22%) patients achieved remission,
and nine (18%) partial response. Thirty-two (62%) patients underwent colectomy. Among 17 patients who responded to ivCys, the non-relapse rate was 45% at 1 year and 36% at 3 years. The non-hospitalisation rate was 67% at 1 year and 50% at 3 years, and the remaining free of colectomy rate was 79% at 1 year and 64% at 3 years. Adverse reactions, including hypomagnesemia (n=38, 72%), hyperkalaemia, (n=13, 25%), catheter infection (n=2, 4%), and renal dysfunction (n=1, 2%) occurred. No major reaction nor mortality occurred.

Conclusions: The short-term efficacy of ivCys for fulminant steroid-refractory UC with massive bleeding was limited in our patients because 60% underwent colectomy within 2 weeks. However, patients who improved with ivCys had a good long-term prognosis and remained colectomy-free. No serious adverse effects were observed with ivCys.

### P339

**Value of cross-sectional imaging in assessing active Crohn’s disease before stoma reversal**

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**Background:** There are currently no guidelines on the need to assess disease activity before stoma reversal in Crohn’s disease (CD). We sought to determine the value of cross-sectional imaging for detecting active CD (i.e. the recurrence or persistence of lesions present after earlier surgery) before stoma reversal.

**Methods:** 38 CD patients underwent cross-sectional imaging before stoma reversal. CD activity was blindly evaluated by an independent radiologist. Postoperative outcomes were recorded.

**Results:** Before stoma reversal, cross-sectional imaging identified active CD in 20 of the 38 study participants (52.6%). CD recurrence was identified upstream of the stoma in 11 of the 38 patients (28.9%), including two with persistent lesions and one with divertive lesions downstream of the stoma. Five of the 38 patients (13.2%) had persistent lesions only (upstream only: n=1; downstream only: n=3; up- and downstream: n=1). Four of the 38 patients (10.5%) had divertive lesions only. In 9 out of 10 tested patients, radiologic and endoscopic assessments gave concordant findings with regard to CD recurrence before stoma reversal. Stoma reversal was delayed in half of the patients with active CD and in none of the patients without active CD. Before stoma reversal, tumor necrosis factor alpha antagonists or immunosuppressants were initiated in 45% of the patients with active CD and 5.6% of the patients without active CD. In the year following stoma reversal, the recurrence rate (in a radiologic assessment) was higher in patients with active CD than in patients without active CD (75.0% vs. 30.8%, respectively; p=0.04).

**Conclusions:** Cross-sectional imaging revealed postoperative recurrence in about a quarter of patients before stoma reversal; this finding may influence the postoperative treatment strategy and outcomes.

### P339

**MadCAM1 expression in intestinal lamina propria endothelium varies among inflammatory bowel disease patients**

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**Background:** Vedolizumab, a monoclonal antibody against α4β7 integrin has been shown to be effective in inducing and maintaining remission in inflammatory bowel disease (IBD). By blocking α4β7, it is preventing the homing of lymphocytes through binding to mucosal vascular adhesion cell adhesion molecule 1 (MadCAM1) localised on the intestinal endothelial cells. It is unclear to which extent the gut homing of lymphocytes is subject to redundant biological process involving other pathways than α4β7-MadCAM1 interaction. There are no data on the interindividual variability of MadCAM1 expression that might influence the effect of vedolizumab. The aim of our study was thus first, to determine the expression of MadCAM1 on the intestinal endothelial cells of IBD patients. Second, we aimed to assess the relationship of MadCAM1 expression with the clinical response to vedolizumab.

**Methods:** All IBD patients referred for the treatment with vedolizumab to one referral center were included. The biopsies or resection specimen from the inflamed intestinal tissue were stained by immunohistochemistry for MadCAM1 expression. Clinical response to vedolizumab was assessed in patients with the minimal treatment duration of 10 weeks and the differences in MadCAM1 expression between responders and non-responders were analyzed.

**Results:** In total, 34 IBD patients were referred for vedolizumab treatment; for 21 of them intestinal biopsies or surgical specimen could have been retrieved and stained for MadCAM1 expression. In three out of these 21 patients (14%) no MadCAM1 expression in intestinal endothelium was detected, remaining 18 patients expressed MadCAM1 to various extent (from 30 to 100% of all vessels). Ten patients had the minimal follow-up of 10 weeks of treatment, 4 out of these 10 patients had clinical response to vedolizumab. The only two patients not expressing MadCAM1 in this group were both no responders with the respective follow-up of 16 and 14 weeks of treatment.

**Conclusions:** MadCAM1 expression in intestinal endothelium varies among IBD patients. Other gut homing mechanisms of lymphocytes might thus prevail in some IBD patients and limit the anti-inflammatory effect of vedolizumab.

### P340

**Prevalence and long-term effect of antiplatelet use in inflammatory bowel disease**

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**Background:** Antiplatelet therapy is the cornerstone in the treatment of cardiovascular disease and atherosclerosis. Based on the role of platelets in inflammation and coagulation it has been suggested that antiplatelet treatment could be beneficial for patients with inflammatory bowel disease (IBD). Data on the prevalence of antiplatelet use as well on safety and long-term effect of these agents in patients...