and gradual increased prediction of mucosal healing (linear-by-linear $p < 0.001$).
Conclusions: We have identified a surrogate marker panel consisting of four serum markers and one clinical parameter that could facilitate prediction of mucosal healing in the future.

DOP Session 8 – Thinking outside the box

DOP064
Faecal calprotectin is superior to faecal lactoferrin and S100A12

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Background: 70% of patients require further surgery after "curative" resection for Crohn's disease. Early endoscopic recurrence predicts later clinical recurrence. The Post-Operative Crohn's Endoscopic Recurrence (POCER) study has demonstrated that drug treatment according to clinical risk of recurrence plus colonoscopic monitoring with treatment step-up for recurrence results in the lowest endoscopic disease recurrence. However colonoscopy is invasive. We have recently demonstrated that faecal calprotectin (FC) can be used to monitor for disease recurrence with a cut-off of >100 μg/g indicating endoscopic recurrence with a sensitivity of 0.89 and negative predictive value (NPV) of 91% (AUC 0.762). FC correlates significantly with both the presence and severity of endoscopic recurrence. We assessed the relative value of the faecal biomarkers lactoferrin (FL) and S100A12 (FS), not previously investigated, for detecting recurrent disease.
Methods: 318 stool samples from 136 patients were tested for FC, FL and FS pre-operatively and 6, 12, & 18 months after resection. Colonoscopy was performed at 6 and/or 18 months. Endoscopic recurrence was assessed blindly and centrally using the Rutgeerts score. CRP and CDAI were assessed longitudinally.
Results: FL and FS concentrations were elevated pre-operatively (median FL 40.9 μg/g, FS 8.4 μg/g). At 6 months, FL and FS both fell (3.0 μg/g and 0.9 μg/g respectively) and were higher in recurrent disease than remission (5.7 v 1.6 μg/g $p = 0.007$ and 2.0 v 0.8 μg/g $p = 0.188$). At combined 6 & 18 month observations the overall prevalence of endoscopic recurrence was 42%. FL >3.4 μg/g and FS >10.5 μg/g indicated endoscopic recurrence (⩾i2) with a sensitivity of 0.70 and 0.91, specificity of 0.68 and 0.12, positive predictive value (PPV) of 53% and 35% and NPV of 81% and 71%, respectively. FL correlated with both endoscopic recurrence ($r = 0.306$, $p = 0.008$) and Rutgeerts score ($r = 0.384$, $p < 0.001$) but S100A12 did not ($r = 0.176$, $p = 0.937$ and $r = 0.168$, $p = 1.000$). CRP and CDAI did not correlate with FL, FS, endoscopic recurrence or endoscopic severity.
Conclusions: Faecal calprotectin is the optimal marker for endoscopic post-operative recurrence, with high sensitivity and negative predictive value, and is superior to CRP and CDAI. It identifies which patients require colonoscopy, allowing 41% of patients to avoid colonoscopy. Faecal lactoferrin offers only modest sensitivity for detecting recurrent disease. Faecal S100A12 is sensitive but has low specificity and NPV.

DOP065
Autoimmune sclerosing cholangitis is associated with small bowel ulceration on capsule enteroscopy

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Background: Patients with primary (PSC) and autoimmune sclerosing cholangitis (AISC) frequently have colonic inflammation classified as ulcerative colitis. However this differs from 'classic' ulcerative colitis in that it is often associated with rectal sparing, a very mild clinical course is typical yet the prevalence of colon cancer, and of pouchitis after colectomy, is higher. We assessed colonoscopy, faecal calprotectin (FC) and capsule enteroscopy (CE) findings in these patients.
Methods: 18 patients with AISC and 16 with PSC – all with clinically quiescent colitis were identified from a Transition IBD clinic. A further 5 and 6 such patients without colitis, respectively, were included. Liver disease had been diagnosed based on positive anti-nuclear or anti-smooth muscle antibodies, characteristic ERCP or MRCP findings and liver biopsy. All patients had undergone CE and at least one sample for FC in the 3 months prior to analysis.
Results: The colitis of PSC and AISC did not differ macro- or microscopically and was described as predominantly right-sided involvement with variable rectal sparing, but otherwise consistent with ulcerative colitis. At the time of testing, although clinically quiescent, all but one patient each with PSC- and ASC-colitis had elevated FC with a mean of 601 (107–999mcg/g) and 627 (115–1744 mcg/g), respectively (normal <60 mcg/g). 7/18 ASC had small bowel lesions at CE, compared to 0/16 with PSC ($p = 0.008$). All the patients without colitis had normal findings.
Conclusions: Despite clinical quiescence of colitis, patients with PSC and AISC have significant inflammatory activity assessed by FC. The colonoscopic and histopathological features resembled ulcerative colitis as previously described, but many patients with AISC had small bowel lesions. This is the first description of small bowel ulceration in patients with AISC and may represent a new category of inflammatory bowel disease.

DOP066
Psoriasis phenotype in inflammatory bowel disease: a case–control prospective longitudinal study

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Background: Psoriasis has been associated with Inflammatory Bowel Disease (IBD). However, whether IBD is associated with specific phenotypes of psoriasis is unknown. In a case–control prospective longitudinal study, we aimed to assess the psoriasis phenotype in patients with IBD, when compared with non-IBD control patients (non-IBD C).
Methods: From January 2011 to April 2013, dermatological assessment was performed in 188 consecutive IBD patients under follow up. Dermatological assessment was focused in detecting the presence of psoriasis (present/absent) and in defining characteristics of psoriasis (localization, phenotype) including severity (mild/moderate/severe). In order to define psoriasis phenotype, each IBD patient with psoriasis was matched for gender, ethnicity and age (±5 years) with one non-IBD patient with psoriasis, referring to the same