According to our second analysis, CMV colitis is associated with an increased risk of developing VTE (OR = 4.01; 95% CI = 1.49–10.78; p = 0.006). Both hospitalization and bowel resection were more common in patients with than without VTE during the follow-up period. None of our VTE patients died. 

Conclusions: The incidence of VTE seems to be lower in Asian than in Western patients. Higher disease activity is associated with an increased risk of developing VTE and CMV colitis may also increase this risk. IBD patients with CMV colitis and higher disease activity may require vigilant observation to diagnose VTE. We strongly support the use of prophylactic anticoagulation during hospitalization in affected patients.

P139 Serum hepcidin levels predict intestinal iron absorption in IBD patients
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Background: Circulating hepcidin is proposed to regulate iron absorption by modulating iron export by ferroportin at the basolateral membrane of the duodenal mucosal cells and/or uptake into the cells at the apical membrane by DMT1. To date, no data have shown a relationship between plasma hepcidin concentrations and iron absorption in IBD patients. In the present study, we used stored samples from a human iron absorption study to further test the hypothesis that plasma hepcidin may explain interindividual variation in iron absorption in IBD patients.

Methods: Serum ferritin (SF) and serum markers of inflammation [high-sensitivity C-reactive protein (hsCRP) and IL-6] were measured in stored samples from a human iron absorption study using commercially available immune-assays. Hepcidin-25 concentrations were determined in fasting samples from 71 adult subjects with IBD (31 UC, 40 CD) and 26 healthy controls. Hepcidin was measured by LC-MS.

Results: There was a positive correlation between hepcidin (mean: 2.3; range: 0.1–7.8 nmol/L) and hsCRP (p < 0.005), but not between hepcidin and serum ferritin (p > 0.05). Whereas iron absorption was negatively correlated with serum ferritin only in patients with inactive disease (hsCRP < 5 mg/dl; p < 0.001), a negative correlation was observed with serum hepcidin in both active and inactive disease (p = 0.006), independent of IBD phenotype. Multiple linear regression models showed that serum hepcidin in isolation significantly predicted the interindividual variation in iron absorption.

Conclusions: Concentration of serum hepcidin, but not serum ferritin, was highly correlated with intestinal iron absorption in IBD patients.

P140 Serum concentrations of insulin-like growth factor-binding protein 5 in Crohn’s disease
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Background: The factors underlying stricture development in CD are not completely understood. It is critical to develop markers that can be used to predict intestinal stricture formation in the early stages of CD. The insulin-like growth factor (IGF) system has a critical role in regulating the growth and development of visceral and vascular smooth muscle. To investigate serum insulin-like growth factor-binding protein 5 (IGFBP-5) levels and intestinal IGFBP-5 expression in patients with Crohn’s disease (CD).

Methods: We analyzed the serum concentrations and intestinal expression of IGFBP-5 in 42 patients with CD, of whom 26 had endoscopically or radiologically proven stricture formation. Nine of the 42 patients had active disease, with a Crohn’s disease activity index (CDAI) > 150. Serum IGFBP-5 levels were analyzed in 20 healthy controls matched by sex and age to the CD patients. Serum IGFBP-5 was measured using an enzyme-linked immunosorbent assay. Intestinal tissue was obtained from patients through endoscopic biopsies. IGFBP-5 expression was detected using immunohistochemistry and was scored semiquantitatively.

Results: The median serum IGFBP-5 concentrations of CD patients were significantly lower compared with healthy controls [median 7.2 (IQR: 5.5–11.3) ng/mL vs. 11.3 (8.0–44.6) ng/mL, P < 0.001]. There was no significant difference between median serum IGFBP-5 levels in CD patients with or without stricture formation [6.9 (5.5–11.3) ng/mL vs. 7.8 (5.3–10.1) ng/mL; P = 0.815]. The serum IGFBP-5 levels were not significantly different between patients with active disease and inactive disease [7.2 (6.5–7.6) ng/mL vs. 7.2 (5.5–11.3) ng/mL; P = 0.890]. No significant correlation was found between tissue IGFBP-5 immunohistochemical staining intensity scores and serum IGFBP-5 levels. No significant difference was found when comparing the serum IGFBP-5 levels among the patients with different tissue IGFBP-5 staining scores (absent/very weak, weak, moderate or strong).

Conclusions: Our results indicate that serum IGFBP-5 concentrations were lower in CD patients compared to healthy controls regardless of disease activity or the presence of stricture formation. Serum IGFBP-5 concentrations were not associated with intestinal IGFBP-5 tissue expression. Therefore, our results do not answer the question of whether IGFBP-5 is involved in the stricture formation of CD, and thus, more research is necessary.

P141 Serum ficolin-2 correlates worse than fecal calprotectin and CRP with endoscopic Crohn's disease activity
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Background: Ficolin-2 is an acute phase reactant produced by the liver and targeted to recognize N-acetyl-glucosamine which is present in bacterial and fungal cell walls. We recently showed
that ficolin-2 serum levels were significantly higher in Crohn’s disease (CD) patients compared to healthy controls. Of note, no difference was found regarding serum ficolin-2 levels when comparing patients with ulcerative colitis to healthy controls.

We aimed to evaluate serum ficolin-2 concentrations in CD patients regarding their correlation with endoscopic severity and to compare them with clinical activity, fecal calprotectin, and CRP.

Methods: Patients provided fecal and blood samples before undergoing ileo-colonoscopy. Disease activity was scored clinically according to the Harvey-Bradshaw Index (HBI) and endoscopically according to the simplified endoscopic score for CD (SES-CD). Ficolin-2 serum levels and fecal calprotectin levels were measured by ELISA.

Results: A total of 136 CD patients were prospectively included (mean age at inclusion 41.5±15.4 years, 37.5% females). Median HBI was 3 [2–6] points, median SES-CD was 5 [2–8], median fecal calprotectin was 300 [120–703] μg/mL, and median serum ficolin-2 was 2.69 [2.02–3.83] μg/mL. The SES-CD score correlated significantly with fecal calprotectin levels (r = 0.639, p < 0.001), CRP (r = 0.444, p < 0.001), and the HBI (r = 0.363, p < 0.001), whereas only a weak correlation was found with ficolin-2 serum levels (r = 0.144, p = 0.094). Ficolin-2 serum levels were higher in CD patients with mild endoscopic disease compared to patients in endoscopic remission (p = 0.021) but no difference in ficolin-2 serum levels was found between patients with mild, moderate, and severe endoscopic disease.

Conclusions: Ficolin-2 serum levels correlate worse with endoscopic CD activity when compared to fecal calprotectin, CRP or Harvey-Bradshaw index. Ficolin-2 serum levels will probably not have a future role as biomarkers to monitor endoscopic CD activity.

P142 Sensitivity of Lennard-Jones criteria in the diagnosis of Crohn’s disease
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Background: Rapid and correct diagnosis of Crohn’s disease (CD) is important to enable early treatment of this progressive disease, however a gold standard is not available. Lennard-Jones et al. defined macroscopic and histological criteria which are widely adopted for diagnosis of CD.

Aim: To determine the sensitivity and specificity of the Lennard-Jones criteria for the diagnosis of CD.

Methods: Included were patients from 3 tertiary centres (Nancy, Barcelona and Vienna) managed as long-standing CD patients assessed up to 6 months after initial diagnosis. These were reviewed. Cases were then re-classified according to Lennard-Jones criteria. CD was rated as “established” (granuloma + one minor criterion or 3 minor criteria, which include macroscopic discontinuity, transmural inflammation, fibrosis, lymphoid aggregates or discontinuous inflammation on histology), “probable” (2 minor criteria without granulomas) or “non CD”. Sensitivity and specificity were calculated including patients with ulcerative colitis (UC) as controls.

Results: Overall, 334 patients with CD and 170 patients with UC were assessed. At time of diagnosis nearly half of all patients were diagnosed as “non CD” (see Table 1).

Conclusions: In this study the final result of QTF® was not influenced by immunosuppression.