

On multiple linear regression, only vitamin D levels and working status were associated with fatigue severity ( $p=0.052$ ;  $p=0.049$ , respectively  $R^2=0.062$ ).

**Conclusion:** Our study findings confirm that the most important factors associated with fatigue during IBD course, are disease activity, presence of inflammation, presence of anxiety and/or depression. Low vitamin D level and working status were predictive factors for fatigue severity. These results highlight the complexity and variability of fatigue in IBD patients.

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##### P684

#### Extra intravenous reinduction of ustekinumab on an already shortening interval is an effective optimisation strategy for patients with refractory Crohn's disease

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**Background:** Designing treatment optimisation strategy for ustekinumab (UST) is challenging. We aimed to evaluate the efficacy and safety of extra weight-based intravenous reinduction of UST on an already shortening interval in patients with refractory Crohn's disease (CD). To the best of our knowledge, this is the first study to report optimised UST treatment in a Chinese population.

**Methods:** This was a single-center retrospective observational study. Dosing optimisation strategies were designed for CD patients showing partial or loss of response to standardised UST with a shortened interval of every-8-week (q8w) dosing, or an extra weight-based intravenous reinduction followed by q8w subcutaneous administration. Clinical, biochemical, and endoscopic findings and trough concentrations of UST were analyzed.

**Results:** Dose optimisation strategies were developed for 27 out of 64 patients; 13 patients required a shortened q8w interval and 14 patients required intravenous reinduction. Crohn's disease activity index [96.5 (39.8,156.3) vs. 158.0 (101.5,175.3),  $P=0.009$ ] and C-reactive protein [3.3 (1.1,7.0) vs. 4.8 (0.5,15.1),  $P=0.023$ ] levels decreased significantly after intravenous reinduction, while the trough concentration of UST increased [1.8 (1.2,8.6) vs. 1.1 (0.2, 6.4),  $P=0.009$ ]. Clinical and endoscopic remission was achieved in 57.1% (8/14) and 33.3% (2/3) of patients, respectively, while 53.8% (7/13) and 25.0% (2/8) of patients achieved clinical and endoscopic remission at around week 8 in the q8w cohort, respectively. The incidence of patient-reported adverse effects was 3.7%. (Figure 1)

**Conclusion:** Intravenous reinduction improved clinical and endoscopic remission safely and effectively in patients showing poor response to standardised UST treatment, which should be an optimal rescue optimisation strategy before switching to biologics targeting other pathways.

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##### P685

#### Early use of infliximab after seton technique for patients with Crohn's disease who initially presented with perianal fistulas

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**Background:** Widespread early use of biologic agents cannot be recommended for all Crohn's disease patients, but for patient subgroups with a predicted disabling course such as perianal fistulas, the early introduction of a biologic agent can be considered. The aim of this study was to assess the outcome of the early use of infliximab after seton technique for patients with Crohn's disease who initially presented with perianal fistulas

**Methods:** We retrospectively reviewed charts of patients with Crohn's disease who initially presented with perianal fistulas between January 2020 and December 2021. After confirm diagnosis of CD by endoscopic examination, all patients underwent both seton procedure and infliximab therapy by single colorectal surgeon. After third injection of infliximab, we removed silastic seton at once, or, in the case of active fistula, replaced it with nylon, and then removed it when the fistula was in remission. Outcomes included clinical remission based on physical examination with radiologic examination (including sonogram and MRI) and endoscopic findings up to last follow up.

**Results:** Overall, 31 patients were identified, [29 males (94%), mean age at diagnosis of Crohn's disease 21.2 (9-32) years]. Half of patients (15/31) showed moderate to severe bowel severity at pre-treatment colonoscopy. Mean number of fistulas was 1.6 (1-4). The overall number of primarily placed setons was 70, of which 33 were inserted through the primary opening and the other 37 were placed between secondary openings. The mean interval between seton insertion and introduction of infliximab was 17.2 (7-30) days. The number of patients who changed silastic seton to nylon was 11. The mean follow-up was 24 months. In 27 patients, Setons were completely removed until last follow up. Interval between seton insertion and complete removal was 7 months ranged from 3 to 24 months. In colonoscopy performed 1 year after infliximab introduction, luminal Crohn's disease of most patients was in endoscopic remission (20/31) or improved (11/31) and there were no case of exacerbation. In 3 patients, because of local sepsis or pain after seton removal, seton procedure was performed again. 30 patients were in clinical remission and had no anal discomfort.

**Conclusion:** Early use (within 30 days) of infliximab after seton technique was very effective for patients with Crohn's disease who initially presented with perianal fistulas. Seton removal should be started at least after remission induction. And replacing silastic seton with nylon was a simple and effective method.