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Long term efficacy of ustekinumab in Crohn’s disease patients after vedolizumab failure
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Background: Ustekinumab (UST) and vedolizumab (VDZ) are approved biologic therapies for moderate-to-severe Crohn’s disease (CD). Data regarding their comparative efficacy in patients previously treated with anti-TNF agents are available. However, data is lacking regarding their long-term effectiveness after failure of a second or third-line biologic treatment. Our aim is to evaluate ustekinumab efficacy after swapping from vedolizumab therapy for primary or secondary failure.

Methods: We conducted a single-centre, retrospective study in CD patients treated with UST as third line biologic therapy who swapped from VDZ therapy upon failure between January, 2019 and October, 2021. We assessed clinical (HBI), laboratoristic (CRP), endoscopic (SES-CD) activity and use of steroids at the beginning of ustekinumab therapy and after, 12 months of treatment. We also collected data regarding previous biologic treatments. Clinical remission was defined as HBI <, 5, while clinical response was defined as a reduction of at least three points of HBI from baseline and/or the suspension of steroids.

Results: Of, 43 patients treated with UST after VDZ failure, 26 had a minimum follow up of, 12 months and were included in the study. All patients had previously been treated with anti-TNF agents. After, 12 months, 4 patients have suspended treatment for failure; among patients still on treatment, clinical remission was evident in, 63% (n = 14) of cases, 13 of them were also in laboratoristic remission. Endoscopy at, 12 months was available in, 11/14 patients in clinical remission; of these, 6 (55%) were in endoscopic remission. In patients who did not achieve clinical remission, 18% (n = 4) obtained clinical response. The last, 18% (n = 4) of patients persisted on therapy.

Conclusion: Ustekinumab seems to be a viable and effective therapeutic option in patients with failure to multiple prior biologic therapies, obtaining deep remission after, 12 months of treatment in a large proportion of patients.

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Correlation of bowel activity parameters in intestinal ultrasound to drug retention and trough drug levels in Crohn’s disease
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Background: Introduction: Intestinal ultrasound can be used to assess transmural healing and response in Inflammatory bowel disease (IBD). Bowel wall thickness (BWT) appears to be the most applicable parameter for defining inflammation. Other parameters include amplified color Doppler signal, disappearance of the normal bowel wall layers and proliferation of mesenteric fat. The implication of incorporating these parameters in defining transmural healing and response is not clear. Our aim was to examine the significance of combining these parameters with BWT for defining transmural healing and response.

Methods: Methods: A post-hoc analysis of data from, 2 trials was used to examine the correlation of the different IUS parameters on drug retention and trough drug levels.

Results: Results: The study cohort included, 94 patients (median age, 24.5) with Crohn’s disease, 44 patients were treated with adalimumab (ADA) and, 50 with infliximab (IFX). There was a significant correlation of failure of drug retention and terminal ileum (TI) BWT >, 3 mm (P=0.07), amplified doppler sign (p<0.001), abnormal bowel wall stratification (p=0.005) and fat hypertrophy (p=0.001). This correlation remained significant when adding any other single abnormal parameter to the BWT (p<0.001), 2 abnormal parameters (p<0.001) or, 3 abnormal parameters (p=0.003). There was also a significant correlation between sufficient trough drug levels (ADA>7.1, IFX>5) and terminal ileum BWT <, 3 mm (P<0.001). However, there was no significant correlation between sufficient trough drug levels and the other ultrasonographic parameters and no significant correlation when combining any other ultrasonographic variables with the BWT.

Conclusion: Conclusions: Increased BWT was correlated with failure of drug retention. The addition of other ultrasonographic activity parameters did not significantly improve the predictive model. Therefore, TI-BWT should be used as the main target in the definition of transmural healing and response.

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How achievable are the STRIDE-II treatment targets in real-world practise and do they affect outcome?
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Background: The Selecting Therapeutic Targets in Inflammatory Bowel Disease (STRIDE) initiative provides recommendations on treatment targets for patients with Crohn’s disease (CD). The Simple Endoscopic Score for CD (SES-CD) is a valid endoscopic score and STRIDE-II recommends its use in clinical practice. We aimed to assess whether the STRIDE-II endoscopic endpoints are achievable and whether the degree of mucosal healing (MH) affects long term outcomes.

Methods: This is a retrospective observational study from, 2015–2020. We included patients with CD who had a baseline and follow-up SES-CD score after biologic therapy initiation. Data was collected via electronic records. The primary outcome was treatment failure, defined as the need for: i) change of biological therapy ii) corticosteroid use iii) CD-related hospitalisation or iv) surgery. We compared rates of treatment failure with the degree of MH achieved. Patients were followed up until treatment failure or study end (Aug, 2021). Statistics were performed using GraphPad v9.1.0 Software.

Results: 50 patients were included (Fig, 1). Table, 1 shows the baseline characteristics. The median time to interval colonoscopy was, 16.3 (11.2–21.3) months. The proportion of patients achieving STRIDE-II end-points were: SES-CD (28, 56%), absence of ulcers (25, 50%) and endoscopic response [50% reduction in SES-CD] (31, 62%). Combined remission (SES-CD and Harvey Bradshaw Index [HBI] <5) occurred in, 25 cases (50%). Treatment failure occurred in, 13 (26%) patients: biologic switch (7/50, 14%), corticosteroids use (2/50, 4%), CD-related admission (5, 10%), or surgery (6, 12%). Median time to treatment failure was, 19 months.