RESEARCH TOPIC CLI3

Predictive value of intestinal ultrasound in Crohn's disease patients treated with advanced therapies

Research area
Medical Area

Clinical Unit name
Inflammatory Bowel Diseases Unit – IBD Unit

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Abstract
Intestinal ultrasound (IUS) has been demonstrated to be highly accurate in detecting disease activity of inflammatory bowel diseases (IBD) and is now considered a precise monitoring tool in Crohn's disease (CD). IUS accurately assesses disease activity driving the decision-making process in CD. IUS response in CD patients can be documented as early as 4 weeks after treatment initiation, with progressive improvement through the first year after therapy start. IUS response rates and trans-mural remission can be assessed in one third of patients over 1 year of therapy. The reduction in bowel wall thickness (BWT) and bowel wall flow (BWF), already after 4-8 weeks of follow-up in CD patients treated with biologics, precisely predict endoscopic response/remission in the long-term. Evidence on the association between IUS monitoring and composite remission (clinical remission, and endoscopic healing) in CD patients treated with Advanced Therapies (biologics and small molecules) has been currently not investigated. Most data on the monitoring of CD patients available mainly evaluated clinical response and biomarkers. The aim of this proposal is to investigate the association between IUS parameters during the monitoring of CD patients treated with advanced therapies and the rates of clinical and endoscopic response and remission at 12-months after therapy start. The secondary aim of the study is to evaluate the feasibility of machine learning for building predictive models of response based on IUS assessment.

Scientific references

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Type of contract

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