SESSION 3
ULTRASOUND AS A VALUABLE TOOL IN IBD

Unlocking Ultrasound's Role in IBD: Outcome Prediction, Endpoint Assessment, and Treatment Strategy

Cathy Lu

Objectives

- Consider emerging evidence for intestinal ultrasound (IUS) in predicting outcomes
- Discuss endpoint evaluation
- Explore the role of IUS in treating-to-target
- Identify when IUS is incrementally useful
- Discuss how to use IUS in practice

Abstract

Intestinal ultrasound (IUS) is a valuable imaging modality with an increasingly prominent role in managing inflammatory bowel disease (IBD) in both clinical practice and trials. Recent evidence supports its utility in **predicting disease outcomes** by assessing key characteristics such as bowel wall thickness, vascularity (colour Doppler signals), peri-enteric inflammatory fat, and wall layer stratification, providing real-time insights into disease activity and complications.[1] This evolving evidence enables more precise risk stratification to guide therapeutic decisions in both early and late disease courses, and in the post-operative setting.

Regarding **endpoint evaluation**, IUS facilitates standardized monitoring of treatment response through validated scoring systems such as the International Bowel Ultrasound Segmental Activity Score (IBUS-SAS) for Crohn's disease (CD)[2] or ulcerative colitis (UC)[3] and Milan Ultrasound Criteria (MUC) for UC.[4] Key IUS parameters and scores complement biomarkers and endoscopy, allowing for objective assessment of inflammation reduction, remission status, and detection of complications.

IUS aligns well with **treat-to-target strategies** by allowing frequent bedside monitoring of therapy response and transmural disease for both CD and UC, empowering clinicians to individualize medication alterations based on imaging improvements or deterioration. IUS is an **incrementally valuable** tool in scenarios where endoscopy, costly or limited accessibility of imaging modalities (e.g., Magnetic Resonance Enterography), or alternatives, carry radiation exposure (e.g., Computed Tomography), or are impractical or contraindicated, particularly in cases involving pregnancy, pediatrics, or situations requiring more frequent monitoring. Limitations include visualizing deep pelvic strictures, proximal small bowel disease, and training required to accurately interpret perianal fistulizing disease.[5]

Overall, use of IUS in **clinical practice** can be smoothly integrated into adult and pediatric routine clinic visits, supporting proactive management, shared decision-making, and endpoint evalution.[5] Training gastroenterologists to perform IUS is essential to expand access.

References

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