

## IBD

## EUS can differentiate Crohn's disease from ulcerative colitis

Crohn's disease and ulcerative colitis can be differentiated by endoscopic ultrasound (EUS), potentially offering an alternative to the gold standard diagnostic combination of clinical presentation, colonoscopy and histology.

This prospective, blinded study used a forward-viewing radial echoendoscope available for the upper gastrointestinal tract, because of its potential to navigate large bowel loops and its benefits over miniprbes and currently available linear echoendoscopes. Patients underwent colonoscopy then EUS, which visualized and measured wall layers and looked for paracolonc abnormalities and lymph nodes. Biopsy samples were taken from the area examined by EUS for histological diagnosis.

EUS established a total wall thickness (TWT) of  $1.71 \pm 0.02$  mm for healthy controls and  $3.51 \pm 0.15$  mm for patients with active IBD. In patients with active Crohn's disease the mucosal and

submucosal thickness were  $1.32 \pm 0.17$  mm and  $2.01 \pm 0.22$  mm; in those with active ulcerative colitis they were  $2.08 \pm 0.11$  mm and  $1.01 \pm 0.08$  mm.

Paracolonc lymph nodes were detected in 73.7% of patients with active Crohn's disease, but in none with active ulcerative colitis. Combining TWT, mucosal/submucosal thickness and the presence of paracolonc lymph nodes differentiated between active Crohn's disease and ulcerative colitis with 92.3% sensitivity. TWT was also found to correlate strongly with histological inflammation scores.

"EUS of the colonic wall might become an important tool in diagnosis and management of active IBD," conclude the authors.

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