Detection of active colonic inflammation by magnetic resonance enterography, including diffusion-weighted imaging, in pediatric patients undergoing investigation for inflammatory bowel disease.

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MRE vs endoscopic and pathologic inflammation
21 patients (9-17 y) investigated for IBD

MRE within 6 w of colonoscopy
Colon divided into six segments

Presence of **diffusion restriction** and **enhancement** recorded for each segment
MRE results compared to biopsy and endoscopic findings
Diffusion Restriction
Contrast Enhancement

Sn 77% Sp 82%
Sn 67% Sp 90%

when compared to biopsy
Diffusion Restriction
Sn 67% Sp 77%
Contrast Enhancement
Sn 53% Sp 80%
when compared to endoscopy
Detection of Active Colonic Inflammation by MRE in Pediatric IBD

Diffusion Restriction  $k \ 0.57$
Contrast Enhancement  $k \ 0.59$
Three recent studies evaluating DWI and colonic inflammation; no histopathology in two, no segmental subdivision in one.
Findings very similar to Dillman et al (2011), reported by the segmental level, but with no differentiation between DWI and enhancement.
Lower sensitivity and specificity than Sirin et al (2015), who reported on DWI, but did not divide by segmental level.
Small sample size (n = 21)
Retrospective
Up to 6 weeks between MRE and colonoscopy