# 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

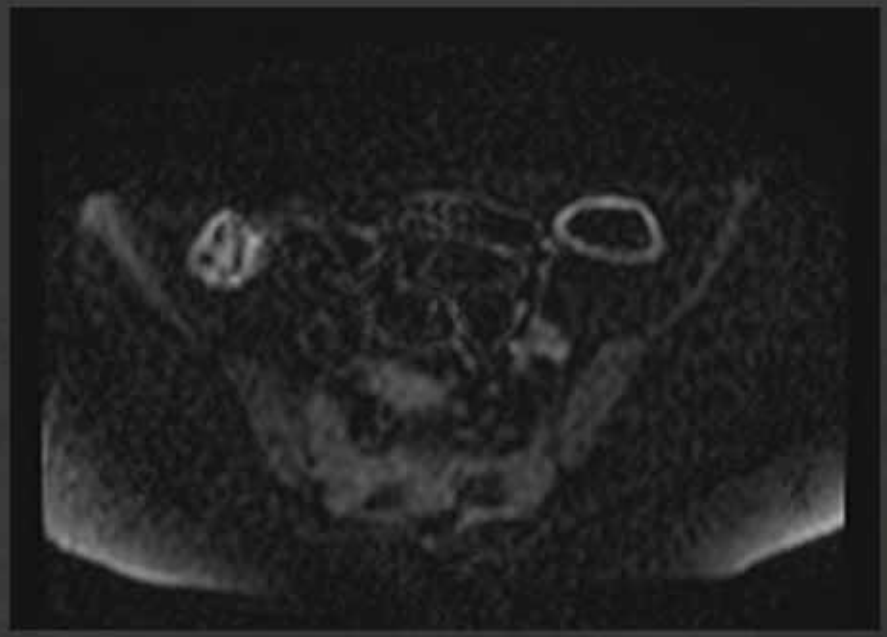
**21 patients** (9-17 y) investigated for IBD

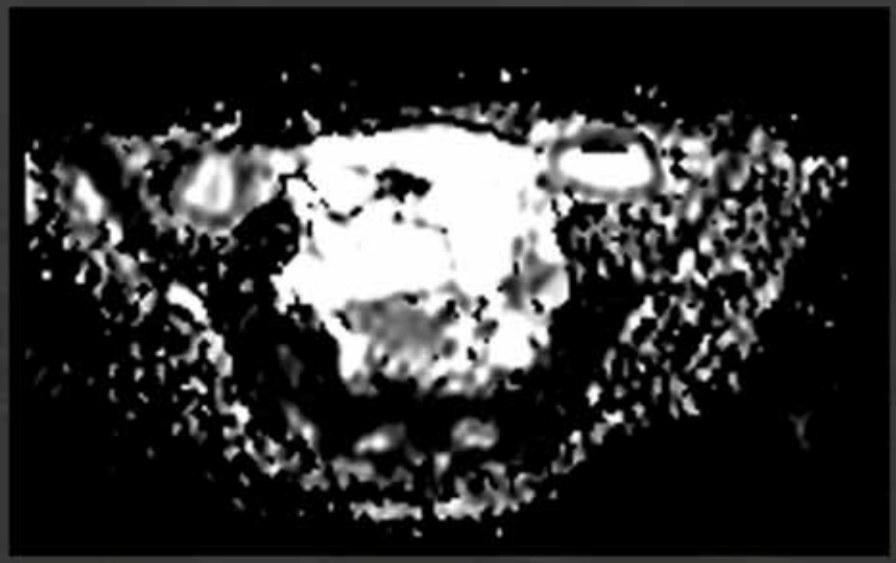
MRE within 6 w of colonoscopy

Colon divided into **six** segments

Presence of **diffusion restriction** and **enhancement** recorded for each segment

# **MRE results** compared to **biopsy** and **endoscopic findings**





Detection of Active Colonic Inflammation by MRE in Pediatric IBD | Lee B, Muchantef K, Ahmed N, Wilson N | McGill University

**Diffusion Restriction** Sn 77% Sp 82%

**Contrast Enhancement** Sn 67% Sp 90%

*when compared to biopsy*

**Diffusion Restriction** Sn 67% Sp 77%

**Contrast Enhancement** Sn 53% Sp 80%

*when compared to endoscopy*

| | |
|---|---|
| **Diffusion Restriction** | κ 0.57 |
| **Contrast Enhancement** | κ 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

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