

On line appendix

1. MRI Scoring of Crohn's disease activity

Score	0	1	2	3
Mural thickness^a	1–3 mm	>3–5 mm	>5–7 mm	>7 mm
Mural T2 signal^b	Equivalent to normal bowel wall	Minor increase in signal-bowel wall appears dark grey on fat saturated images	Moderate increase in signal-bowel wall appears light grey on fat saturated images	Marked increase in signal-bowel wall contains areas of white high signal approaching that of luminal content
Perimural T2 signal	Equivalent to normal mesentery	Increase in mesenteric signal but no fluid	Small fluid rim (≤ 2 mm)	Larger fluid rim (> 2 mm)
Enhancement^c	Equivalent to normal bowel wall	Minor enhancement – bowel wall signal greater than normal small bowel but significantly less than nearby vascular structures	Moderate enhancement – bowel wall signal increased but somewhat less than nearby vascular structures	Marked enhancement – bowel wall signal approaches that of nearby vascular structures

^a Measured using electronic calipers.

^b Compared to normal small bowel.

^c Compared to nearest vessel.

3. Histological Acute Inflammatory Score (AIS) (based on Borley et al [21])

Mucosal ulceration	0 – None 1 – Aphthous ulcer (<7 mm) 2 – Linear ulcer 3 – Confluent-large ulcer
Oedema	0 – None 1 – Mild 2 – Moderate 3 – Severe
Neutrophils	0 – No increase 1 – Mild increase 2 – Moderate increase 3 – Marked increase
Depth of neutrophilic penetration	0 – None 1 – Mucosa 2 – Submucosa 3 – Muscularis 4 – Serosa/extramural fat