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Isolated terminal ileitis - when is it not Crohn's disease?

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We have read with interest the article entitled: “Isolated acute terminal ileitis without pre-existing inflammatory bowel disease rarely progresses to crohn’s disease”. Only 4.6% of 108 patients with acute terminal ileitis (TIs) diagnosed at ileocolonoscopy developed crohn’s disease (CD).[1] There is paucity in the literature on how best to manage patients with TIs and what percentage of these patients eventually develop CD.[2] More specifically, literature is even more limited when it comes to patients with isolated terminal ileitis (ITI) on small bowel capsule endoscopy (SBCE).[3] Ideally, patients with TIs secondary to CD should be picked up without delay to ensure treatment is initiated early in the course of disease to prevent long term sequelae.

We conducted a study on 23 patients (mean 39 years; 57% females) with ITI on SBCE and compared these to 27 patients (mean 39 years; 59% females) with terminal ileal crohn’s disease (TICD). Patients with a recent history of gastroenteritis, NSAIDs and angiotensin receptor blockers use were excluded. Only 17% of patients with ITI had evidence of minor findings on ileocolonoscopy including erosions / aphthous ulcers with histology showing non-specific inflammation in 50% of patients. All patients with ITI (5) who underwent SB MRI had a normal investigation compared to the TICD group in whom MRI SB was abnormal in 75%. Findings at ileocolonoscopy and imaging are similar to those presented in this study were patients who eventually developed TICD were more likely to have abnormal findings at ileocolonoscopy and on SB imaging.

Blood parameters including mean faecal calprotectin (160 vs 99 ug/g p=0.791) and mean CRP (13 vs 7 mg/L; p=0.209) were higher in the TICD group compared to the ITI group, although these did not reach statistical significance.

We were also able to compare the findings of the 2 groups on SBCE. The mean number of ulcers on SBCE in TI were significantly less in the ITI group (3) than in those with TICD (5).(p=0.005) There was luminal narrowing in 2 patients (7%; p=0.493) and mucosal oedema in 10 patients with TICD (37%; p=0.001). Whilst patients with ITI had more aphthous / small ulcers, patients with TICD had more circumferential, deep, large, linear ulcers.(p=0.018)

Follow up data with an average of 9 months was available for 78% (18) of the ITI group. 80% of those who underwent a repeat SBCE showed an improvement in the findings which corresponded to an improvement in CRP (3mg/L at index presentation vs 7mg/L; p=0.523). At follow up 39% improved clinically without treatment whilst 33% were treated as IBS. One patient who was treated with budesonide, improved.

Our study demonstrates that SBCE can provide another modality of investigating patients with TIs and of distinguishing idiopathic TIs from CD. It further confirms that patients with abnormal SB imaging are more likely to have underlying CD. Patients with ITI are likely to have milder findings on SBCE compared to TICD group and they are more likely to improve over time without treatment. Larger studies would help substantiate our findings.

References

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