Reviewer's report

Title: Change in Anatomical Distribution of Inflammatory Bowel Disease in Children: A Retrospective Cohort Study

Version: 1 Date: 9 April 2012

Reviewer: David R Mack

Reviewer's report:

MAJOR REVISIONS

1) Methods: Include information of the number of biopsies that were taken from region of the intestinal tract. Include information as to endoscopy to the terminal ileum in those undergoing colonoscopy. This would be helpful for the reader to know to ascertain whether sampling bias was relevant. Alternatively, report on the macroscopic changes and not the microscopic changes.

2) Include information on those excluded either because they did not have second endoscopy or incomplete data.

3) Statistics: Clarification of the statistics used for the variables would be helpful. It is not clear how the variables were handled (multivariate/univariate). Also with the number of subjects in the groups as to how this information was handled.

4) With ulcerative colitis, it is the information for those that were not pancolitis at diagnosis that is probably relevant given so many with total colonic involvement at diagnosis. Further analysis probably can’t be done considering the numbers involved.

5) Results: Are those with rectal sparing having complete sparing? If so, they should be classified as Crohn’s disease (Reference 1 of the manuscript). If it is relative rectal sparing then this should be clarified and so stated.

6) Results-Patients with CD: Are TI, G1T, IC and C separate and distinct groups? Is there no crossover patients? For instance are there those with TI and G1T (or other combinations) or all they all separate groups? This may be important as perhaps those with more extensive disease at diagnosis are more likely to progress to even more extensive disease.

MINOR REVISIONS

1) Title: Add ‘Histopathological’ prior to ‘Changes in Anatomical Distribution…’ as this will orient reader more quickly.

2) Abstract-Background: Remove the first sentence as may not be all that accurate. Alternatively, change under-investigated to under-reported.

3) Abstract-Methods: add ‘with’ between ‘records of children’ and inflammatory bowel disease’
4) Abstract-Methods: Clearly define that you are investigating microscopic histopathology changes and not endoscopic macroscopic changes.

5) Methods: The first sentence could be clarified. Suggest ‘a database of children with IBD followed at the Pediatric IBD clinic at the Stollery Children’s Hospital, Edmonton, Canada and medical records….’ The second sentence could then be shortened.

6) Methods: For the variables recorded, clearly state that items 3 and 4 were microscopic changes.

DISCRETIONARY CHANGES

1) Include in the discussion why microscopic histopathological changes were evaluated rather than endoscopic macroscopic disease and the discussion as to the relevance between the two for outcome of disease.

2) I would suggest including that the findings are also limited in nature as the study only dealt with microscopic changes and so significant areas of the small intestine were not evaluated in this study due to limitations of access for endoscopic biopsies.

3) One possibility to overcome one of the limitations of the study is to compare those that were not included in the current study with those that were included. That is, were those excluded less active at diagnosis? Less extensive at diagnosis? On fewer meds at diagnosis? Having fewer complications?

Level of interest: An article of limited interest

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I declare that I have no competing interests