Evidence for the C-seal device remains inconclusive

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Dear Editor:

We read, with interest, the recent paper by Morks et al. in the October 2013 issue of *International Journal of Colorectal Disease* [1]. As surgeons, we are always attempting to reduce the rate of anastomotic leakage and its consequences after anterior resection. The C-seal does appear to be an interesting device; however, we feel we must disagree with the conclusions made in this paper.

The authors presented 37 patients who were operated upon in six centres over a 10-month period. No details were given to explain the inclusion criteria, and this was a small study given the time period. The authors compared their results with those expected from the published literature. They state in the paper that the rate of anastomotic leak in the study group was only 3 %. We contend that a further three patients who had a perianastomotic abscess and two with presacral infiltration must (by definition) have had an anastomotic leak as well. This means that 16 % in total had an anastomotic leak compared to 11 % in the literature. The rate of 16 % does not include a further two patients in the study group who had radiographical evidence of a leak. The authors admit in the main body of the text that the additional patients are likely to have had an anastomotic leak, but the figures quoted in the abstract are misleading. The authors state that the C-seal may reduce the consequences of anastomotic leak; however, anastomotic leak is known to have an adverse effect on bowel function and quality of life even when anastomotic continuity is maintained [2]. Therefore, the endpoint should be all leaks, not just those that have required intervention.

The patients who had an anastomotic leak all had a defunctioning ileostomy. The authors state that the C-seal may have lessened the consequences of anastomotic leak. Whilst this is possible, it is far more likely that the presence of a defunctioning ileostomy affected the clinical consequences [3]. It is very difficult to make any meaningful comparisons to the quoted literature with such a small number of patients. We note that the authors are undertaking a randomised trial, and we will await the results of this eagerly. It may be that the C-seal can prevent or improve adverse functional consequences after a leak and give potential long-term functional benefit. It would seem that based on the results of this small study there is no benefit in using a C-seal to prevent anastomotic leak or its consequences.

References

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