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Letter: normalising the ileoanal pouch - more than a one-step technique

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We read with interest the paper by Quinn et al[1] which attempted to define the parameters that describe a normal pouch function. Though we congratulate the authors for undertaking a multi-modality approach to define this population, we feel there are multiple factors that should be considered beyond the pilot study.

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First, the small cohort of 14 patients, combined with significant variability in findings of anopouch manometry and balloon expulsion findings limits any generalisability of these readings. Adding to these limitations is the finding of thickening of the cuff and/or pouch in 4 (29%) and 3 (21%) of included patients, respectively. It is important to know if these patients have any notable findings on anopouch manometry or balloon expulsion testing.

Secondly, the selection of patients with "self-reported healthy pouch function" is a problematic criterion. Three of the 20 subjects were found to have symptoms of pouch evacuation disorder on the abbreviated Rome questionnaire – were these subjects still included in the 14 patients subsequently analysed? If so, this further complicates interpretation of the findings of this study. Nonetheless, the questionnaires used in this study – the Ileoanal Anastomosis Survey (Mayo Clinic) and the SIBDQ – remain unvalidated, and in the case of the SIBDQ shown to be unsuitable for use in pouch patients.[2]

The lack of correlation between disease activity and pouch function is well described.[3] The absence of normal pouchoscopy and pouch histology as inclusion criteria represents therefore represents a limitation when defining normal values of pouch function. Morphological and dynamic MRI has been shown to poorly correlate with histological signs of inflammation, emptying difficulties or leakage.[4] Furthermore, anal manometry prior to proctocolectomy is predictive of post pouch function and hence this context is important before normal values in a pouch can be determined.[5] Another key variable is accounting for differences in pouch design, which have been shown to all have varying pouch volumes and functionality.[6] Specifically, the J pouch design has been associated with a smaller pouch volume, increased faecal urgency and seepage.

We contend that a more suitable and comprehensive approach, following exclusion of inflammation by thorough assessment by pouchoscopy with histology, together with symptom-based questionnaires, may be to prospectively validate "normal findings" using patients of different genders, age and pouch designs and other variables as outlined in Table 1. We envisage subtle but important differences across some of these variables which reflect the difficulty in describing normality to date in patients with an ileoanal pouch. We congratulate the authors on an attempt to help define what is a normal pouch function and hope these considerations may be something you take forward beyond the pilot study.

Table 1: Variables that may help define a normal pouch

Variable	Impact of variable
Pouch design	Known to affect pouch volume, stool frequency, seepage. J-pouch associated with smaller pouch volume compared with W and K pouches. J- Pouch associated with increased faecal seepage compared to K pouch.[6]
Age	Decrease in function over time[7]
Gender	Differences in function reported. Women have higher number of daily bowel movements, frequency, urgency and daily seepage.[8]
Inflammation of the pouch	Associated with poor function.[9]
Pre-pouch manometry	Shown to be predictive of pouch function with low pre-and post-operative resting pressure predictive of seepage, pad use and incontinence.[5]
Pelvic floor	Pelvic floor muscles may predict pouch function. Those with non-relaxing pelvic floor dysfunction were found to have abnormal findings in balloon expulsion tests, external anal sphincter electromyography.[10]

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