Comment on: Prospective randomised multicentre trial comparing the clinical efficacy, safety and patient acceptability of circular stapled anopexy with closed diathermy haemorrhoidectomy

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Letters

Should we refer diminutive polyps to post-CTC polypectomy?

We read with interest paper by Graser et al comparing CT colonography (CTC) with optical colonoscopy (OC) and other screening tests in an average-risk population. In a series of 311 subjects, the authors described 13 cases of advanced neoplasia (high-grade dysplasia or a villous component) in <10 mm polyps. In detail, seven of these cases occurred in <5 mm adenomas, so that diminutive adenomas accounted for 16% of all the advanced neoplasia detected in the study, also being more frequent than 6–9 mm advanced adenomas. Such a relatively high rate of advanced neoplasia in <5 mm polyps would suggest some concern in not referring subjects with diminutive adenomas to OC, because of the fear of “an increase in colorectal cancer incidence and mortality”, as emphasised by the authors.

However, it should be noted that such data are remarkably different from the results of other larger studies. In two of these studies, together comprising >4000 asymptomatic subjects, the rate of total advanced neoplasia explained by diminutive polyps was consistently <3%, also being 4–5 times less frequent than 6–9 mm advanced neoplasia, as largely expected. Such a higher frequency of 6–9 mm advanced neoplasia as compared with <5 mm advanced neoplasia was also confirmed in a very large European screening study. Based on the consistent results of these studies, we feel that it is extremely unlikely that the referral of diminutive polyps to OC would substantially increase the efficacy of CTC in reducing the burden of colorectal cancer mortality. On the other hand, the very high prevalence of diminutive polyps in the general population and the very low rate of advanced neoplasia in such lesions would needlessly increase the post-CTC referral rate, affecting the favourable cost-effectiveness profile of a CTC screening.

The discrepancy between the data of Graser et al and those of previous studies may possibly be related to different reasons. The study under discussion here is based on only 311 patients, so that a small sample bias cannot be excluded. Measurement of polyp size was done by comparison with an open biopsy forceps, which is known to be a suboptimal method for measuring polyps. A selection bias cannot be excluded, since unlike most of the previous screening studies, in which a 4–6% prevalence of advanced neoplasia is generally reported, a very high rate of advanced neoplasia, namely 9%, was found in the present study, suggesting a somewhat accelerated carcinogenesis in this group of patients.

Therefore, we feel that the current clinical practice of no post-CTC referral for diminutive polyps should not be changed following the results of this study, although we may agree that further studies are needed to explain whether some unknown factors may affect the prevalence rate of advanced neoplasia and its distribution according to polyp size in different geographical areas.

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Comment on: Prospective randomised multicentre trial comparing the clinical efficacy, safety and patient acceptability of circular stapled anopexy with closed diathermy haemorrhoidectomy

We read with interest the details of the prospective randomised trial comparing circular stapled anopexy with closed diathermy haemorrhoidectomy by Thaha and co-workers. The authors state that stapled anopexy offers a significantly less painful alternative to excisional haemorrhoidectomy and achieves a higher patient acceptability. Although the overall symptom control and safety are similar in the majority of the patients, the re-treatment rate for recurrent prolapse at 1 year is higher following the stapled procedure when compared with conventional haemorrhoidectomy.

The authors emphasised the reduction of postoperative pain in the stapled haemorrhoidectomy patients. We believe, however, that pain is not an ideal measure with which to compare stapling techniques with classic haemorrhoidectomy because of intertechnique differences in the pathophysiology of pain. It is functional outcome that is important, both in the short term, regarding postoperative complications, and in the long term, regarding anal sphincter function, and recurrence of haemorrhoidal disease. In this respect we feel that several studies are not well documented. In several reports the stapling technique amounted to a circumferential full-thickness biopsy of the lower rectum in >20% of patients, and no data on postoperative anorectal physiology, and no comparison with preoperative data were provided.

We believe that the stapling procedure increases operative costs; advanced surgical skills are necessary and a learning curve can be defined. However, stapled haemorrhoidectomy could produce injuries to the internal anal sphincter; anal sphincters are also stretched by the bivalve retractor or by the stapler head. Finally, the stapling procedure does not allow the treatment of concomitant anal disease.

Several operative techniques to treat haemorrhoids have been described. Milligan–Morgan’s open haemorrhoidectomy is most commonly used; other procedures, such as Ferguson’s closed haemorrhoidectomy and Parks’ submucosal haemorrhoidectomy, are technically more complex. We feel that the surgeon’s choice of technique should be primarily based on personal experience and technical training, and only a competently performed technique produces satisfactory results; haemorrhoidectomy needs skilled operators. If technical guidelines are rigorously followed, the feared complications associated with surgical procedures, such as anal stenosis and sphincteric injuries, are greatly reduced. Furthermore, prophylactic metronidazole suppresses postoperative pain, increases patients’ satisfaction and allows them to return to work earlier. Laser haemorrhoidectomy has no advantages over standard techniques; it is also quite expensive and no less painful.

The authors report no data regarding Whitehead’s haemorrhoidectomy. We habitually carry out the Milligan–Morgan operation and we are always very precise with regard to the integrity of the mucocutaneous bridges, to avoid postoperative anal stenosis. In 12 years, we have treated 3000 patients with haemorrhoids; of these, 30 patients (four of these with relapsed haemorrhoids after the stapling technique), in whom prolapsed haemorrhoids were completely irreducible and it was not possible to distinguish and separate the three piles, underwent Whitehead’s radical haemorrhoidectomy. No episodes of incontinence were observed in either the short term or the long term (5-year follow-up). In only one case did we verify an anal substenosis months after
the operation, which did not require an anoplasty, but resolved after the use of anal dilators for 1 month. The stenosis did not recur in the course of follow-up.

The type of haemorrhoidectomy that a surgeon performs is primarily based on personal experience and technical training, and only a good technique can produce satisfactory results. Furthermore, on the basis of our experience we feel that Whitehead’s haemorrhoidectomy still has its place in selected cases with precise indications.

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Authors’ response

In their letter, Brisinda et al take issue with the use of postoperative pain as an outcome measure in studies on haemorrhoid surgery including in our trial. However, as despite the technical differences between stapled anopexy and excisional haemorrhoidectomy, pain remains an important outcome measure in treatment of haemorrhoids, especially from the patient’s perspective. A glance at the history of treatment of haemorrhoids would suggest that the notoriety surrounding surgery for haemorrhoids stems from the significant postoperative pain following excisional haemorrhoidectomy and indeed this fact more than anything else drove the desire for alternative procedures including stapled anopexy.

We agree with Brisinda and colleagues that both short-term and long-term functional outcomes, including symptom control, control of the disease, and avoidance of complications and recurrences following surgery, are important outcome measures, and these were central to our trial reporting along with the postoperative pain measurements. Inadvertent full-thickness excision of the rectal doughnut after stapled anopexy can only be explained by a technical failure, may have relevance to the learning curve and potentially could cause serious consequences to the patient. Within our trial, routine preoperative and postoperative transanal ultrasound scan was used as a quality control outcome to document sphincter integrity, which served as a surrogate measure of the safety of the procedure. In the trial protocol, we did not stipulate routine anorectal physiology due to logistic reasons but reserved these investigations for patients who developed complications, and agree that this information would have been important to explore the potential physiological alterations produced by both interventions.

They are correct in their argument that a carefully performed haemorrhoidectomy with preservation of mucosal bridges and meticulous attention to haemostasis would avoid serious complications including of stenosis and stenosis, but without necessarily decreasing the postoperative pain. Furthermore, their argument of “only a good technique can give satisfactory results” applies equally to both stapled anopexy and excisional haemorrhoidectomy just as for any other surgical procedure. Given the favourable postoperative pain outcome following stapled anopexy, if allowed to choose, patients may prefer to have stapled anopexy instead of traditional haemorrhoidectomy despite the higher recurrence rate as suggested by the trial data. This aspect of stapled anopexy requires further examination and evidence basis before conclusions can be drawn, and until such time careful counselling of the patient on the pros and cons of both techniques would allow empowering of the patient and informed decision making. Lastly, there is no doubt that the single-use circular stapler offsets the costs against stapled anopexy, making it an expensive choice when compared with excisional haemorrhoidectomy. However, from a true economic perspective the short-term and long-term “utilities” associated with stapled anopexy are still largely unknown and the cost-effectiveness data from our trial, when published, will to some extent help address the paucity of evidence on the economics of stapled anopexy.

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Comparison of staining methods in collagenous colitis

I read with interest the recent article by Pardi on collagenous colitis. In spite of the increased awareness of this condition among clinicians and pathologists, collagenous colitis, described by Lindström in 1976 and characterised by a thick subepithelial colagen band (>10 μm), is still underdiagnosed in many parts of the world. This is partly due to different diagnostic criteria and to the fact that the lower border of the band is not well demarcated. Therefore, correct estimation of the thickness of this band is not always reliable.

To compare the efficacy of the different staining methods used in measuring the thickness of the collagen layer in collagenous enterocolitis, including tenascin expression, we examined histological sections of 245 endoscopic biopsies from 199 symptomatic patients (140 female and 59 male) referred to the endoscopy unit at the University College Hospital Galway in a prospective study over a period of two and half years. A further goal was to determine if H&E fluorescence (FHE) in which H&E sections are viewed under a fluorescence microscope is as efficacious as routine methods in demonstrating the depth of the collagen band. Table 1 summarises the distribution of biopsy site for all patients. Fifty-four patients (36 female, 18 male) were cases of coeliac disease.

Sections, stained with haematoxylin and eosin (H&E), van Gieson or by enzyme-conjugated antibody technique (tenascin) were examined with a conventional light microscope. H&E-stained sections were also visualised with a fluorescence microscope (FHE). Employing image analysis software, collagen band thickness was measured on identical areas at points between two well-oriented crypts or villi using different staining and illumination techniques. Cases having values of 10 μm or more in thickness were diagnosed as having an abnormally thick subepithelial band, consistent with collagenous colitis (>10 μm, equivocal 7–10 μm, normal <7 μm).

The collagen band thickness was abnormal (>7 μm) in six of the 21 colorectal biopsies. The mean thickness of the subepithelial collagen band in all specimens was 5.2 μm (range, 1.7–17.2; SD 3.7) with H&E, 7.0 μm (2.0–21.1; 4.8) with FHE, and 4.4 μm (1.2–11.0; 2.9) with van Gieson. Differences between the groups are statistically significant (p<0.001). Even among those with abnormal collagen band, there were statistically significant (p<0.009) differences in band thickness measurements between the two illumination methods. Furthermore, out of the six biopsies with a collagen band thickness >7 μm, four were <10 μm, but measured >10 μm on FHE and are reclassified as definite collagenous colitis. Subepithelial collagen band formation in biopsies taken from the small intestine; collagenous sprue was only seen in one female

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