Correspondence

Endoscopic v radiological techniques for rectal bleeding

SIR, — The paper by Dr Irvine and her colleagues (*Gut* 1988; **29**: 1188–93) compared endoscopic and radiological techniques for detecting colonic pathology in patients with rectal bleeding. The investigations have been reported and the results analysed meticulously but the authors are in danger of putting too much weight on the results of this study of only 71 of 315 eligible patients. In addition, their paper vastly over emphasises the importance of diagnosing diverticular disease and anorectal causes of bleeding.

The most important reason to investigate a patient with rectal bleeding is to exclude neoplasia and thus be able to reassure the patient, not to identify diseases such as diverticular disease which is so common that it exists in up to two thirds of patients who are older than 70 years.¹ Only infrequently is diverticular disease the cause of bleeding in those patients who bleed and happen to have diverticular disease.² As regards anorectal pathology, none of these investigations will provide the clinician with the best opportunity of making the diagnosis. Inspection, digital examination and proctoscopy are the techniques to be used for diagnosis of anorectal conditions, but in this paper the authors have used barium enema, flexible sigmoidoscopy, and colonoscopy.

To analyse the results the authors have used a combination of their investigations to form a gold standard and any lesion detected 'was required to be reported on at least three test results'. This implies that lesions detected by barium enema but not by colonoscopy were automatically labelled as false positives although they could well have been true positives.

The lack of an unequivocal gold standard such as longterm patient follow up with repeated examinations where clinically indicated and the small number of neoplastic lesions detected indicates that as regards detection of colorectal neoplasia no meaningful conclusions can be drawn from this study.

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References

- 1 Painter NS, Burkitt DP. Diverticular disease of the colon, a 20th century problem. *Clin Gastroenterol* 1975; **4**: 3–22.

- 2 Goulston KJ, Cook I, Dent OF. How important is rectal bleeding in the diagnosis of bowel cancer and polyps? *Lancet* 1986; **ii**: 261–4.

Reply

SIR, — Having anticipated many of the concerns raised by Dr Charnley in his letter, we wish to preface our response by stressing that our study was designed to quantitatively and rigorously compare different techniques of colonic imaging in a population with rectal bleeding. We illustrate in the Table below that the 71 patients who completed our study were indeed representative of the total population with rectal bleeding except for a lower incidence of cancer and polyps in patients who dropped out. Dr Charnley appears to have missed the major thrust of our report in which we took great pains to emphasise that although diverticular disease is highly prevalent, in a minimum of patients (25%) was it felt to be the source of blood loss.

Table Subject characteristics

	Study subjects	Drop outs	Non-participants
n	71	18	226
% Males	46	56	44
Mean age ♂	53.2 (17.6)	54.4 (16.1)	52.7 (15.8)
Mean age ♀	53.8 (15.9)	61.9 (19.6)	55.4 (17.7)
Primary diagnosis (%):			
Cancer	7	0	4
Polyp	27	11	19
IBD	5	0	9
DD	25	22	12
Ischaemia	1	0	0
AVM	3	0	2
Anal	17	28	15
Misc	2	17	4
Normal	13	22	35

DD: diverticular disease; AVM: angiodysplasia; Misc: miscellaneous.

We agree with Dr Charnley that one important reason to investigate rectal bleeding is to exclude neoplasia and this is evidenced by the substantial incidence of cancer and polyps in our population. Inflammatory bowel disease was not uncommon, however, and is considered by physicians and patients as an important diagnosis associated with significant morbidity. For the 17% of subjects who had only anorectal disease, we had not intended to imply that our diagnostic approach should replace proctoscopy and digital rectal examination, as the latter has a <10% sensitivity for lesions such as rectal cancer. All patients had received proctoscopy by at least one physician before the study.

It is true that lesions detected by barium enema and not by either colonoscopy or flexible sigmoidoscopy could have been labelled incorrectly as false positives. One cannot ethically undertake iterative