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 overemphasises 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. Only infrequently is diverticular disease the cause of bleeding in those patients who bleed and happen to have diverticular disease. 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.

R M CHARNLEY

Dept of Surgery,
Floor E, West Block,
University Hospital,
Queen’s Medical Centre,
Nottingham NG7 2UH

References

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

<table>
<thead>
<tr>
<th></th>
<th>Study subjects</th>
<th>Drop outs</th>
<th>Non-participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>n</td>
<td>71</td>
<td>18</td>
<td>226</td>
</tr>
<tr>
<td>% Males</td>
<td>46</td>
<td>56</td>
<td>44</td>
</tr>
<tr>
<td>Mean age of</td>
<td>53-2 (17-6)</td>
<td>54-4 (16-1)</td>
<td>52-7 (15-8)</td>
</tr>
<tr>
<td>Mean age of</td>
<td>53-8 (15-9)</td>
<td>61-9 (19-6)</td>
<td>55-4 (17-7)</td>
</tr>
<tr>
<td>Primary diagnosis (%):</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cancer</td>
<td>7</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Polyp</td>
<td>27</td>
<td>11</td>
<td>19</td>
</tr>
<tr>
<td>IBD</td>
<td>5</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>DD</td>
<td>25</td>
<td>22</td>
<td>12</td>
</tr>
<tr>
<td>Ischaemia</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>AVM</td>
<td>3</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Anal</td>
<td>17</td>
<td>28</td>
<td>15</td>
</tr>
<tr>
<td>Misc</td>
<td>2</td>
<td>17</td>
<td>4</td>
</tr>
<tr>
<td>Normal</td>
<td>13</td>
<td>22</td>
<td>35</td>
</tr>
</tbody>
</table>

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
imaging procedures in patients, however, and we would welcome alternate suggestions by Dr Charnley. We have at least one year follow up of all participants which does not challenge any diagnoses in the main report.

E JAN IRVINE AND RICHARD H HUNT
Division of Gastroenterology,
McMaster University,
1200 Main Street W,
Hamilton, Ontario,
Canada L8N 3Z5

Family occurrence of achalasia
sir,—The familial occurrence of achalasia or diffuse oesophageal spasm in four families described by Dr Frieling (Gut 1988; 29: 1595–602) and colleagues is of considerable interest as is their review of other recorded instances of the disease involving members of the same family. The preponderance of horizontal transmission leads them to suggest inheritance through an autosomal recessive gene. This pattern of involvement, however, would be compatible with common exposure to some agent in the family environment in the past because the development of clinical symptomatology almost certainly lags many years behind the initiation of the pathological process.

We have been able to find only one instance of achalasia in monozygotic twins which suggests that the disease is not usually genetically determined. In a study of 1012 first degree relatives of 167 patients with achalasia we were unable to detect one established case of achalasia and none of the 447 siblings of patients with achalasia had the disease although several had oesophageal symptoms. This indicates that in the vast majority of patients no hereditary factor is present and those in which there is a family history of the disease are an interesting but atypical minority. In our view it would be wrong to suggest that achalasia or diffuse oesophageal spasm are inherited disorders and thus divert attention from the search for an environmental causative agent.

J F MAYBERRY AND M ATKINSON
Dept of Surgery,
University Hospital,
Queen’s Medical Centre,
Nottingham NG7 2UH

References