Correspondence

Objective assessments of precancer by histopathologists and the more objectively determined, and not necessarily parallel, changes in DNA content revealed by flow cytometry.

J B J FOZARD, P QUIRKE, AND M F DIXON
Departments of Surgery and Pathology, University of Leeds, Leeds

References

DNA aneuploidy in ulcerative colitis

SIR.—We read with great interest the article by Mr JBJ Fozard and colleagues on the value of DNA aneuploidy in assessing malignant changes in ulcerative colitis. We have carried out a similar study but unlike Mr Fozard we found that aneuploidy was strongly associated with malignancy and with dysplasia, and was not found in any patient in the absence of these changes. We have studied 262 non-cancerous mucosal samples from 50 patients undergoing colectomy for ulcerative colitis. The clinical groups and findings are summarised in the Table overleaf.

Our results indicate aneuploidy to be a specific marker of neoplastic change in extensive ulcerative colitis and suggest that flow cytometry may be of value in detecting such changes. In contrast the Leeds group concludes that ‘the finding of DNA aneuploidy in a colorectal biopsy would have no predictive value in deciding whether or not a patient has concurrent carcinoma elsewhere in the bowel’.

This discrepancy is surprising as both Mr Fozard and ourselves used the method of Hedley et al1 in preparing samples for flow cytometry. Possible explanations may lie in differences of tissue preparation (we did not remove excess tissue with a scalpel), in the interpretation of DNA histograms (our average coefficient of variation was lower than theirs), and in the interpretation of the histopathology. We do not believe that differences in histopathological interpretation are important in our study because high levels of inter observer agreement have been found for pathologists studying our specimens (data in preparation). On the other hand we have noted that manipulating tissues with a scalpel blade leads to unsatisfactory DNA histograms and an unacceptably high coefficient of variation, and we think this may explain the difference in our results.

Whilst the discrepancy between the Leeds results and our own suggests that flow cytometric findings may be less objective and reproducible than is generally realised, we have found our own technique to produce reliable and repeatable results. We therefore wonder whether the Leeds group findings (of a high incidence of aneuploidy in tissues not showing neoplastic changes, and of a relatively low incidence of aneuploidy in established cancers) may be misleading.

D M MELVILLE, J M A NORTHOVER, J R JASS, N A SHEPHERD, AND J E LENNAND-JONES
ICRF Colorectal Cancer Unit, St Mark’s Hospital, London EC1V 2PS

References
Correspondence. Books. News

<table>
<thead>
<tr>
<th>Patient group</th>
<th>Patients (n)</th>
<th>Mean age (yr)</th>
<th>Mean disease duration</th>
<th>Number with DNA aneuploidy in non-cancerous mucosa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancer in UC</td>
<td>21</td>
<td>48.9</td>
<td>19.0</td>
<td>11/21</td>
</tr>
<tr>
<td>Dysplasia in UC</td>
<td>10</td>
<td>46.8</td>
<td>18.3</td>
<td>3/10</td>
</tr>
<tr>
<td>Longstanding UC (no dys)</td>
<td>12</td>
<td>47.3</td>
<td>18.8</td>
<td>0/12</td>
</tr>
<tr>
<td>Short history UC (no dys)</td>
<td>7</td>
<td>26.0</td>
<td>2.0</td>
<td>0/7</td>
</tr>
</tbody>
</table>

Dysplasia in UC = patients who in their colectomy specimens had low or high grade dysplasia (dys); UC = ulcerative colitis. Average coefficient of variation for flow cytometry curve = 4-7%.

Books


This book is the 13th of the well known series based on the gastroenterology courses held annually in Oxford. In this case the course was held in January 1985. The book contains a series of short reviews by British authors of a variety of topics, grouped under six headings: metabolic liver disease, gastrointestinal infections, surgical controversies, disorders of motility, nuclear magnetic resonance and polyps. In general the chapters are well written and easily read and the quality of the printing is excellent.

I found that the most useful sections were those on infections and on nuclear magnetic resonance (NMR). The infections include campylobacter, giardiasis and the topical 'gay bowel' syndrome. The basic principles of NMR are explained and the following chapter describes briefly some images of liver and other diseases with impressive illustrations.

The other sections all contain interesting material, although much of it is obtainable from the many current large textbooks on gastroenterology produced on both sides of the Atlantic. The chapters on fatty liver, endocrine abnormalities of chronic liver disease, disorders of gastric emptying, chronic intestinal pseudo-obstruction and on bacteria and colorectal adenomas are particularly valuable however, because they bring together a lot of information about topics that are described only superficially even in the larger textbooks. The chapters on haemochromatosis, Wilson’s disease, polyp-cancer sequence, familial polyposis coli and the surgical treatment of oesophagitis and biliary strictures relate to topics that are well covered elsewhere, although in several cases the author’s own experience and contributions to the literature are of particular interest. Special tribute should be paid to the late Mr E C G Lee whose chapter on minimal surgery for Crohn’s disease of the small gut describes the technique of strictureplasty, which he did so much to popularise.

This is a book for the clinician rather than for the scientist and it is useful both for the gastroenterologist in training and for the established practitioner. It is a ‘good read’ but the hardback edition seems overpriced and I would not recommend it for private purchase. With so many annual reviews, current opinions etc now available it is difficult to know where these annual proceedings from Oxford should stand in the catalogue. Their appeal is brevity, clarity, and topicality and they invite quick and even superficial reading rather than detailed study. Within these limits, this edition can be warmly recommended as a worthy successor to the previous 12 volumes.

G E SLADEN

News

**Leeds Course in Clinical Medicine**

This course will be held from 8–11 September 1987 in Leeds. Details from Director of Continuing Education, The University, Leeds LS2 9JT. Tel: (0532) 435036.

**Obesity Surgery**

The Third International Symposium on Obesity Surgery will be held in Rapallo (Genoa, Italy) from 20–23 September 1987. Details from Dr Ezio Gianetta, Istituto di Patologia Chirurgica, Università di Genova, Ospedale S Martino, 16132 Genova, Italy.

**25th Anniversary of the Royal College of Pathologists**

The Silver Jubilee meeting will be held in the Queen Elizabeth II Conference Centre, London from 8–11 September, 1987. Programme available from Concorde Services Ltd, 10 Wendell Road, London W12 9RT. Tel: 01-431 3106.

**Future Research Approaches in IBD**

A workshop conference on the mechanisms of chronic infection and inflammation will be held from 7–11 October 1987 at the Marriott Harbor Beach Resort in Florida, USA. Details from Marjorie Merrick, Res & Educ Dept, National Fdn for Ileitis and Colitis, 444 Park Avenue South, New York, NY 10016, USA.