metastases.⁴ Follow up studies are currently in progress.

We have also assessed the haemodynamic changes in patients with cirrhosis.⁵ As we expected, these patients also had abnormally raised Doppler perfusion index values but total liver blood flow was significantly reduced. The mechanisms underlying the changes in hepatic perfusion appear to be different in benign and malignant liver diseases. There is experimental evidence that the reduction in portal venous blood flow in subjects with liver metastases is because of increased splanchnic vascular resistance, whereas in cirrhosis, there is an increase in resistance to flow at the sinusoidal level of the liver. We have shown that the congestive index, defined as the ratio of the portal vein cross sectional area to the time averaged velocity of blood in the portal vein, was significantly raised in patients with cirrhosis compared with control subjects and patients with liver metastases. We concluded that duplex/colour Doppler sonography measurement of congestive index can discriminate between the perfusion changes because of the presence of hepatic metastases and those caused by cirrhosis, thereby increasing the diagnostic power of the technique.

The use of duplex/colour Doppler sonography rather than conventional duplex ultrasound would allow almost all patients with benign and malignant liver diseases to be assessed. It simplifies the examination with the ease of accurate identification of vessels of interest, and showing anatomical variations, and the duration of scanning is significantly reduced. This technique is, however, operator dependent and we suggest that a dedicated ultrasonologist is essential for meticulous standardised examinations to be performed, otherwise conflicting conclusions about duplex/colour Doppler sonography flowmetry in the abdomen will result. Further studies are required to explore the full diagnostic potential of this technique.

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Reply

SIR,—We wish to comment on the letter of Dr Leen *et al* to say that we are delighted that the estimation of the ratio of hepatic arterial flow to total hepatic blood flow using Doppler ultrasound does provide a valuable haemodynamic indicator in both malignant and cirrhotic disease, as we had hoped from our work.

We have noted that Dr Leen *et al* have applied a colour flow Doppler ultrasound system to their measurements and have chosen to study the common hepatic artery. Unfortunately, neither of these options was available to us since we did not have access to a colour flow system for this study. In addition, the original aim of our work was the study of the hepatic arterial buffer response in humans under non-invasive physiological conditions. We had previously established in a pilot study¹ that measurements of proper hepatic arterial flow were possible and the published work was undertaken as a precursor to studying proper hepatic artery and portal venous changes after feeding. The study of common hepatic artery flow was thus inappropriate since the gastric and gastroduodenal components would make a contribution to increase common hepatic artery flow when only hepatic arterial flow was required.

We had hoped to increase the population to whom the technique could be applied by showing that proper hepatic artery flow was a constant proportion of common hepatic artery flow. We showed, however, that the ratio of flow in the two vessels varies from subject to subject and seems to be dependent on the cross sectional areas of the vessels.

We are pleased that the measurements in the common hepatic artery of Leen *et al* do provide consistent results and thus extends the population to whom this technique is applicable. We are slightly concerned, however, that the gastric and gastroduodenal components are considered insignificant even in patients with gastric and oesophageal cancer!

We agree entirely with the concluding comments of Dr Leen and colleagues and hope that the full potential of flow measurements in the hepatic artery and portal vein using colour Doppler sonography will be exploited in both research and clinical applications in the future.

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BOOK REVIEWS

Current gastroenterology. Vol 11. Edited by G Gitnick. (Pp 386; illustrated; £69.95.) St Louis, MO: Mosby Year Book, 1991.

The problem with this book is that it is not about current gastroenterology. The authors did as they were told and reviewed 'last year's papers' in their subject but the year in question was mid-1988 to mid-1989. The book came out in late 1991. Such a delay reduces its value greatly. One reason for the delay may be the book's luxurious format – it is a hardback complete with photographs of x rays, CT scans

etc. But I suspect the main reason is that the authors had too much to cope with and could not meet their deadlines. Two of them had well over 300 papers to review. The ten chapters are, in the main, well written and they cover most of the important areas of gastroenterology, with little overlap. The chapter on nutrition is an oddity; it is a didactic review, has a relatively small reference list, and includes much non-gastrointestinal material.

If you like this kind of thing you will find it done just as well and much more currently in *Current opinion in gastroenterology*. I do question, however, the cost-benefit ratio of this approach and the value of the product. It is artificial to review a topic a year at a time and difficult to produce a readable, let alone, well argued article. I myself find articles of this kind hard to read and so tend not to read many of them. I suspect a market survey would show I am not alone. For the authors it is a hard slog producing a book like this; is it really worth all those ruined weekends?

K W HEATON

Ambulatory esophageal pH monitoring: practical approach and clinical applications. By Joel E Richter. (Pp 229; illustrated; £47.) New York: Igaku-Shoin Medical Publishers, 1991.

In his preface, Dr Richter notes that a practical 'how to do it' book on ambulatory oesophageal pH monitoring has not been available hitherto. This book aims to be a practical guide to the technique and to review its applications and limitations. Eighteen American authors have covered the subject comprehensively in seventeen chapters, beginning with an excellent little historical review and concluding with a section on alkaline reflux. Brief case reports, included in several chapters, provide succinct illustrations of why and how pH monitoring can (and sometimes cannot) be used to resolve a clinical problem.

This is undoubtedly a useful book for individuals who are introducing the technique to their own practice. They will soon, however, encounter the problems faced by everyone with experience of pH monitoring and the text is a little disappointing in its treatment of some of these difficult areas. The interpretation of oesophageal pH results obtained in patients with non-cardiac (or, more usually, normal coronary arteriogram) chest pain and in asthmatics could perhaps have been addressed more directly to aid the clinician who must make a clinical decision on the basis of the oesophageal findings.

My first consultation of the index – seeking guidance on equipment disinfection – referred me to the wrong page: the information provided in the section to which the index should refer is inadequate for a book claiming to be a practical guide. Other topics seem adequately and correctly indexed. Overall, the book scores 7 out of 10. There is nothing similar on the market and only by obtaining numerous journals can the reader obtain the information that is gathered together here in a sensible sequence. Like the technique itself, the book does not provide all the answers, but it is probably the best there is just now.

R C HEADING

Ulcer disease. Investigation and basis for therapy. Edited by Edward A Swabb and

Szabo Sandar. (Pp 527; illustrated; \$172.50.) New York: Marcelle Dekkar, 1991.

The editors (engineer-doctor in the pharmaceutical industry and doctor-experimental biologist in academia respectively) have brought together from 38 contributors (many well-known names), 24 interesting essays broadly grouped under origins, presentations, therapies and human investigation. Six chapters are 'unusual' as their subject matter is generally not covered in other books: biological rhythms (a fascinating insight into the chronobiology of peptic ulcer disease); anti-oxidant ulcer therapy (a welcome glimpse into free-radical mucosal damage); ulcer disease, what is known and what questions remain (the latter aspect needs expanding); statistical methods in trials of anti-ulcer drug treatment (the theory seems so much simpler than practice!); meta-analysis (a growth industry); and an academic investigator's perspective (a leading authority's viewpoint). Three other chapters deal with the role of an independent clinical research organisation in the development of new drugs, the industry's perspective of human investigation and development of anti-ulcer drugs and the clinical investigation of anti-ulcer drugs in Japan. These reflect how close basic science, clinical investigation, the pharmaceutical industry, and the regulatory authorities have come together.

There are detailed up to date reviews on treatment with antacids, histamine H₂ receptor antagonists, colloidal bismuth subcitrate, omeprazole, and prostaglandins. The remaining essays deal with physiopathology (detailed); clinical presentation (somewhat misleading title); NSAID gastropathy (by two rheumatologists: good to see a non-gastroenterologist's viewpoint!); haemorrhage from peptic ulcer (with particular emphasis on the role of drug therapy); endoscopic therapy of bleeding peptic ulcer (a 'hot' topic) and surgical treatment (concise; tightly written). All chapters have abundant references. Inevitably, there is some overlap but this does not detract.

It is hard to believe so much has happened in peptic ulcer disease in just 20 short-long years. Final verdict: a good book for beginners and old-hands alike; well done, editors and authors! But at \$172.50 (surely a rip-off?), perhaps the publishers want only well-off libraries to purchase this volume.

K D BARDHAN

Cope's Early diagnosis of the acute abdomen. Revised by William Silen. (Pp 301; illustrated; £15.00.) New York: Oxford University Press, 1991.

Zachary Cope's *Early diagnosis of the acute abdomen* now in its 18th edition, remains the definitive volume on the subject. No one in the 70 years since the first edition was published has matched (let alone exceeded) Zachary Cope's comprehensive description of a lifetime of clinical practice and no one is better placed than William Silen to take on the daunting task of trying to revise the volume. All surgeons are familiar with the book and many can quote whole passages off by heart.

For this very reason one tends to be over critical on reading each new edition, just as one tends to judge each new interpretation of Wagner or Shakespeare by reference to its predecessors. Judged in this highly critical fashion, some stresses and strains do seem to

have emerged in the new edition. Perhaps the problem is insoluble. Silen has cleverly and faithfully adopted the style and general approach of the original Cope material; and while it works very well in describing clinical experience, this approach is less appropriate when discussing modern developments such as imaging the appendix. Here, mere recitation of opinion is less appropriate, and there are some unhappy examples throughout the text where the narrative switches from sound clinical commonsense to high tech investigation and then back again.

This lends an almost 'schizophrenic' air to some sections of the book which is not helped by the use of the first person singular. Thus, when the author remarks 'I suffered . . . an attack of acute gangrenous appendicitis in 1907' it is clearly Zachary Cope talking but when in the same volume it gives the author's personal opinion of ultrasound, computed tomography and magnetic resonance imaging, it is presumably Silen who remarks 'I have encountered several situations. . . .'

Certainly no one could have done more than William Silen to take the clinical wisdom of Zachary Cope forward into the present era of analytical and investigational medicine. As edition succeeds edition, however, the end result is becoming just a little like da Vinci revised by Van Gogh: both men consummate artists in their own right but the end result (Mona Lisa in a cornfield with crows) interesting, but not entirely satisfying.

F T de DOMBAL

Surgical treatment of anal incontinence. By Charles V Mann, Richard E Glass. (Pp 160; illustrated; DM 290.) Berlin: Springer-Verlag, 1991.

A beautifully illustrated monograph. There are many good examples of the value of line drawings in black and white with a single red colour overlay to depict muscles. This technique is particularly effective in illustrating the muscle complexes of the pelvic floor.

The book is essentially a record of 'How I do it' rather than 'Should it be done?' It is questionable whether, in the present stage of its development, the gracilis muscle sling procedure to restore anal incontinence should be described in such graphical technical detail so as to encourage general or even specialist surgeons to undertake it. The description of the gracilis sling is preceded by the statement that very few colorectal surgeons have more than minimal experience with this procedure. Then it continues by stating the reasons for their reluctance, followed by five good reasons why this still must be regarded as an experimental procedure to be performed only by those with particular experience and as part of a research programme.

Why do the authors describe operations that would never feature in a 'Best buy' list. The book contains one of the clearest descriptions of abdominal rectopexy using the Ivalon (polyvinyl) alcohol sponge implant. This is a technique that has such an incidence of potentially serious infective complications which have made it unacceptable on both sides of the Atlantic ocean. The fact that some people continue to use the technique is not a good enough reason for illustrating it so beautifully and so tempting others to try it. More authoritative guidance about which operation should be used would make this into a 'How I advise

you to do it' monograph rather than 'How some people still do it!'

Despite these important reservations, this is a book to which the experienced colorectal surgeon is likely to turn for technical details, even if many are of outdated procedures.

J ALEXANDER-WILLIAMS

Endoscopic retrograde cholangio-pancreatography. Technique, diagnosis, and therapy. By J H Siegel. (Pp 442; illustrated; \$199.) New York: Raven Press, 1991.)

Drawing on his own vast experience, Dr Siegel has attempted a comprehensive state of the art reference work on ERCP for both trainees and experienced endoscopists. He has impeccable credentials for the task and 7500 ERCPs, 5000 sphincterotomies and 1000 biliary stents can't be wrong. Is he as successful with the word processor as he is with the duodenoscope?

Apart from a well balanced chapter on sphincter of Oddi dysfunction by Professor Delmont, this is a single author text with the expected advantages of uniformity of style and relative absence of duplication and contradiction. The book is divided into three sections – basic technique, diagnosis (including pathology) and therapeutic endoscopy. It is indeed comprehensive, and most important aspects of ERCP are covered. Approximately half of the 400 pages are devoted to high quality illustrations of every conceivable variant of duodenoscopy, pancreatography and cholangiography with legends providing clear explanations.

Perhaps inevitably for a single author work, it is a personal experience of ERCP and this is both the strength of the book and its weakness. Dr Siegel excels when discussing practical technique and he provides a superb account. I have only a few minor criticisms resulting from differences in UK practice. It is a pity, however, that he stops short and does not divulge more hints or tricks of the trade. When the going gets tough there is little guidance for the struggling inexperienced endoscopist. He is equally good on x ray interpretation and diagnosis, but has unusual ideas about the classification of pancreatitis proposing that a 'subclinical' form is responsible for post ERCP pancreatitis. The results of therapeutic ERCP he cites are mainly from his own group and are second to none, but there are few comparisons with those obtained at other centres.

This then is an account of the practice of ERCP by one of the foremost exponents, but by the same token it falls short of being a comprehensive review. In common with most ERCP accessories the book is not cheap at \$200, but it is a useful and informative aid for endoscopists who carry out and enjoy therapeutic ERCP.

C AINLEY

The stomach. Edited by S Gustavsson, D Kumar, D Y Graham. (Pp 464; illustrated; £75.) Edinburgh: Churchill Livingstone, 1991.

Two centuries ago, a meal had many courses prepared by many chefs: our Prince Regent's dozen chefs served a dinner with 116 dishes. Today, almost every medical book is multi-authored and multiedited. Large meals with many cooks and large books with many authors have some excellent dishes and chapters but you may end with indigestion and a muddled head.