

not imposed.³ Thomas and colleagues report a significantly higher rate of screen compliance among participants living with other participants, while those who had a diagnostic colorectal examination with negative results had significantly lower odds of complying.⁴

Another study showed that compliance in first degree relatives of patients with colorectal cancer was significantly higher than in spouses (69% versus 47%, $p < 0.01$), as was among those whose relatives died recently from colorectal cancer.⁵ However they found that time since diagnosis in the index case had no effect on the compliance rate, in contrast with the findings by the authors. Finally, Neilson and coworker report that compliers are found to be of higher socioeconomic classes than persistent non-compliers, to have more personal and family experience of illness, and to visit their dentists more regularly.⁶

These data, in conjunction with that presented by the authors, helps us better understand the factors affecting compliance, while screening for colorectal cancer.

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- Hobbs FD, Cherry RC, Fielding JW, Pike L, Holder R. Acceptability of opportunistic screening for occult gastrointestinal blood loss. *BMJ* 1992; **304**: 483-6.
- Powe BD. Fatalism among elderly African Americans. Effects on colorectal cancer screening. *Cancer Nursing* 1995; **18**: 385-92.
- Robinson MH, Pye G, Thomas WM, Hardcastle JD, Mangham CM. Haemoccult screening for colorectal cancer: the effect of dietary restriction on compliance. *Eur J Surg Oncol* 1994; **20**: 545-8.
- Thomas W, White CM, Mah J, Geisser MS, Church TR, Mandel JS. Longitudinal compliance with annual screening for fecal occult blood. Minnesota Colon Cancer Control Study. *Am J Epidemiol* 1995; **142**: 176-82.
- Stephenson BM, Murday VA, Finan PJ, Quirke P, Dixon MF, Bishop DT. Feasibility of family based screening for colorectal neoplasia: experience in one general surgical practice. *Gut* 1993; **34**: 96-100.
- Neilson AR, Whyne DK. Determinants of persistent compliance with screening for colorectal cancer. *Soc Sci Med* 1995; **41**: 365-74.

Reply

EDITOR,—Thank you for the opportunity to reply to the letters commenting on our publication (*Gut* 1996; **38**: 421-5). Compliance with screening, although a complex issue, has a major impact on the ability of a programme to detect significant colorectal pathology. The additional data provided by Anand and colleagues are of clear interest.

Although we were pleased with overall uptake of screening (64.9%), our report shows – by demonstrating that some subjects were originally interested but then declined the offer of screening – that compliance is not an all or nothing phenomenon – that is, people may respond to an invitation but drop out when the process of screening is made clear. Obviously, the simpler the screening protocol the more likely it is to maximise uptake. This point is again made by Robinson *et al* in a recent report comparing one and

three day HemeSelect testing who found compliance to be significantly better for the shortest test protocol.¹ A further example of this phenomenon is shown by our screened subject who refused further intervention despite being shown to have multiple left sided polyps at an uncomfortable colonoscopy.

The implication of these findings is that compliance can yet be improved but will peak at a level at which people are simply not willing to be screened despite experiencing a high personal risk of colorectal cancer. We have recently been very disappointed to discover a 32 year old patient who was offered (and declined) screening in 1992, only to present with an obstructing, Duke's stage C caecal carcinoma in 1996. This patient is a member of an HNPCC family whose other family members are examined at St Marks' Hospital Family Cancer Clinic and who did not wish to be examined at any cost.

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- Robinson MHE, Marks CG, Farrands PA, Bostock K, Hardcastle JD. Screening for colorectal cancer with an immunological faecal occult blood test: 2-year follow up. *Br J Surg* 1996; **83**: 500-1.

BOOK REVIEWS

Comparative Physiology of the Digestive System of Vertebrates. 2nd ed. Edited by C E Stevens, I Hume. (Pp 400; illustrated; £55 (\$79.95)). Cambridge: Cambridge University Press, 1996. ISBN 0-521-444187-7.

For those who want to compare the colon lengths of the short nosed bandicoot and the koala bear, but have neither the fare, nor the agility to catch the beasts for themselves – this is very definitely the book to buy and a terrific saving. However, these days a book must appeal to a less specialised market.

As the authors make clear, there is value in the study of an organ system from a non-anthropocentric viewpoint: – it's all very well for you blighters who live off the fat of the land, with your well cooked digested meals, to gloat about how much more streamlined your guts are – but what about the rest of us raw fibre eaters, or shell eaters? – We'd like to see how long you survived on eucalyptus leaves, or how far you could fly on a diet of beetles!

On the one hoof, some of us fermenters have to retain our digesta a lot longer than you to derive any benefit from it. Furthermore, some of us are very large and have to eat a heck of a lot of 'indigestible' stuff to keep swanning around the savannahs. A neat way of reducing the bulkiness of our digesta is by having a faster throughput of fermentable particulates than of fluid. However, selective retention of small particulates over fluid entails specialised gastrointestinal structures behaving effectively as filter beds. These structures are variously present in our fore,

mid or hindguts and very thoroughly described in this book, with excellent diagrams.

On the other hoof – predatory birds, like hawks, although eating only the juiciest morsels, obviously cannot afford to carry around excess baggage, or they will find themselves in the relegation zone. So they fluidise, digest, and ferment their prey in their gizzards prior to absorption in a comparatively short small intestine and vestigial hindgut; non-digestible particulates are jettisoned in this species prior to absorption.

And on the third hoof – (the additional advantage of non-anthropocentrism), the humming bird, weighing in at three grams – has an enormously high metabolic rate and therefore a continuous need for a rapidly available energy supply, has no room to accommodate either for a fermentation or digestive chamber; so it has neither caecum nor crop and lives exclusively on a fast food diet of liquid sugar.

So, we can learn a lot about animal adaptation to varying nutrition from simple macroscopic examination of the gastrointestinal tract in relation to body size. This book is very good on these aspects of comparative physiology.

In this second edition, the scope of the book has been broadened to include interesting and useful chapters on digest transit and retention, which includes a really useful discussion on digestive strategies in omnivores and herbivores; motor activity and a chapter on the evolution of the digestive system. There is a rather sparse chapter on the comparative biochemistry of digestive processes and a better one on bacterial fermentation in the gastrointestinal tract.

My main criticism of the book is its relative lack of attention to microscopic anatomy, or structure-functional correlates at the microscopic level. Perhaps this requires another book. My overall view is that this is a useful and stimulating book, well worth reading and I look forward to an enlarged third edition.

RICHARD NAFTALIN

The Kidney in Liver Disease. 4th ed. Edited by M Epstein. (Pp 561; illustrated; £95). Philadelphia: Hanley and Belfus, 1996. ISBN 1-56053-166-5.

This is the fourth edition of Epstein's 'The Kidney in Liver Disease', the first having been published in 1978. The format of each is similar with multiple authorship. The book is largely devoted to problems of alcoholic cirrhosis, in particular sodium retention and renal failure. Minimal attention is given to other types of cirrhosis or to the important condition of fulminant hepatic failure. Alcoholic hepatitis, a sometimes reversible condition that may be complicated by profound renal and electrolyte disorders is not specifically mentioned.

The balance of authors leaves something to be desired – the editor is the sole author of eight of the 27 chapters and only three are written by hepatologists. The lack of hepatological input is constantly apparent throughout much of the text. Is it really appropriate for the chapters on diuretic therapy, peritoneovenous shunting or extracorporeal techniques to have been written by nephrologists? Anyone from a specialist liver unit with an interest in these subjects would have far more

hands on experience and provide much more useful clinical advice.

The interrelation between renal sodium retention and ascites formation has created heated debate between the 'underfill' and 'overflow' theories for nearly three decades. In 1988 a modification of the underfill hypothesis was proposed suggesting the primary abnormality to be peripheral arteriolar vasodilatation occurring early in the course of the disease and thus creating a deficit in the 'effective' extracellular fluid volume with secondary renal sodium retention. This concept, known as the 'peripheral vasodilatation' hypothesis has rapidly gained widespread acceptance with little critical appraisal. The chapter by Levy on the pathogenesis of ascites is therefore particularly refreshing. He cites the evidence against this hypothesis, particularly that at the pre-ascitic and early ascitic stages of cirrhosis there is evidence for 'overflow' in that the renin-angiotensin-aldosterone system is suppressed. He also describes his own experimental work and favours the overflow concept for the early stages of the disease, but at a later stage the evidence supports 'underfill', views strongly supported by the reviewer.

There are individual detailed chapters on the renin-angiotensin system, aldosterone, and the sympathetic nervous system, all without mention of the changes reported in fulminant hepatic failure. There are also chapters on the possible roles of the more recently described lipid derived autacoids, natriuretic factors, nitric oxide, and endothelin. The chapter on atrial natriuretic factor highlights the apparent renal resistance to this substance in cirrhosis, but there is no mention of the evidence for the opposite response to aldosterone, a possible increased renal sensitivity. The chapters on nitric oxide and endothelin are of considerable potential interest, but necessarily of a preliminary nature.

The final chapters are devoted to treatment. There is an excellent and useful review by Planas and colleagues on the role of paracentesis with volume expansion for the treatment of ascites. Based on their own data they conclude the treatment is quicker and safer than diuretics. However, in addition to spironolactone their diuretic regimen includes frusemide, which many hepatologists prefer to avoid if possible because of the associated complications. The frequency of complications from diuretics was substantially less in a study from Milan that they quote, in which frusemide was only given if necessary. Later chapters describe results to suggest either paracentesis with ultrafiltration of the fluid and intravenous return, or dialytic ultrafiltration with peritoneal return may both have less complications than paracentesis with volume expansion. Peritoneovenous shunting and transjugular intrahepatic portasystemic shunting are given separate chapters. Both procedures may have a role in the management of refractory ascites, but are not free of potentially serious complications. These occur most frequently in patients with the most advanced cirrhosis – that is, those most likely to be refractory to diuretics. The evidence presented for the role of either treatment in renal failure is extremely poor.

In view of the limited input by hepatologists and the restriction of the text largely to alcoholic cirrhosis the book will have little to interest the practising clinical hepatologist. However, there is much useful up to date information for the researcher in the field.

S P WILKINSON

Pediatric Gastrointestinal Disease. 2nd ed. By W A Walker, P R Durie, J R Hamilton, J A Walker-Smith, J B Watkins. (Pp 2113; illustrated; £199). St Louis, Mosby-Year Book, 1996. ISBN 0-8151-9082-4.

I suppose I can give no greater endorsement to this book than to say that I had already bought it several weeks before the review copy arrived. In those few weeks I had used the book more than in the five years during which the first edition had been available on my shelf. The first edition had in some ways been a little disappointing. It lacked clinical edge and was patchy in its coverage, so much so that I often found myself turning to textbooks of adult gastroenterology for help with difficult clinical problems. These problems have been attended to in the second edition and the authors are to be congratulated in producing a highly successful and comprehensive summary of paediatric gastroenterology, hepatology, and nutrition.

I never really know what political commentators mean by the term 'defining moments', but if I did, I would risk a cliché here and say that this may well be one for paediatric gastroenterology. Like most paediatric sub-specialists, paediatric gastroenterologists have for many years fought to capture their specialty from general paediatricians and from gastroenterologists who dabble in paediatrics. Only six years ago the view of the generalist was that 'we all treat constipation, and refer the children with inflammatory bowel disease to the adult gastroenterologists'. Although paediatric gastroenterology and hepatology are clearly rooted in paediatrics, being so intimately concerned as they are with the growth and development of children, this book defines them as something separate from general paediatrics, and for that the editors are to be congratulated. In many ways this book represents the coming of age of paediatric gastroenterology and hepatology.

The editors have assembled an excellent and international team of contributors, each of whom writes with authority. The ontogeny of structure and function are well represented in the early chapters, and the book is commendably strong on physiology and biochemistry. Readers seeking guidance on clinical management will not be disappointed. The chapters are remarkably up to date for such a large, multi-author production. Having a colleague who is a contributor revealed what benign coercion the authors were exposed to by their editors to submit on time. Hepatology is well catered for, and the chapters on pancreatitis are particularly helpful and pragmatic. I enjoyed the chapters on the gut in immunodeficient children and in the post-surgical patient, both areas in which paediatric gastroenterologists are becoming increasingly involved in collaborative management with other hospital colleagues. Sections on diagnostic and therapeutic techniques, including nutritional support, are largely new and particularly welcome.

Reservations are few. Important as constipation is in childhood, I was a little confused to find two separate chapters on the subject. In future editions the editors may also wish to consider a chapter on gastrointestinal disease in the adolescent.

Who should buy this book? Certainly every department of paediatric gastroenterology and hepatology should have a copy, as should every trainee. The generalist will undoubtedly benefit from access from time to time,

although cost will be a major consideration. They should think twice ... and then buy.

I W BOOTH

NOTES

UK National Barrett's Oesophagus Registry

Funding has now been secured to initiate a UK National Registry of patients with Barrett's oesophagus as a joint project between the Oesophageal Section of the British Society of Gastroenterology and the Upper Digestive Tract Cancer Group of the European Cancer Prevention Organisation (ECP). A scientific committee has been formed to oversee the Registry and a registrar has been appointed who has a public health background and considerable experience of epidemiological work in pre-cancerous conditions. Two pathologists with expertise in this area will provide a central resource to oversee histopathological aspects of the Registry.

The project will begin with pilot studies in two Health Districts, with the aim of identifying all patients with a diagnosis of Barrett's oesophagus, together with basic demographic data and information on criteria for diagnosis of Barrett's and the extent of the columnarised segment. The next stage will be to extend the pilot study to embrace a whole Health Region in an attempt to form a baseline for estimating incidence and prevalence of diagnosed cases with a view to comparison with those of other Health Regions, other countries, and fluctuation with time. The third stage will be to identify diagnosed cases for all Health Districts in the UK, and it is envisaged, subject to appropriate funding, that assistance will be available to visit endoscopy units and help retrieve and coordinate this information.

Once established, it is believed that the Registry will provide a valuable resource relating to prevalence, demography, and pathophysiological profile of patients with Barrett's oesophagus, as well as its natural history and response to various treatment modalities. It is envisaged also that the Registry and its infrastructure will act as a coordinating body in the promotion of prospective randomised studies as well as providing a central resource for confirmation of high grade dysplasia and investigation of molecular genetic aspects of Barrett's oesophagus, and a database of publications in the field which BSG members would be able to access. The proposal to establish this National Registry received considerable support from members of the Oesophageal Section who were polled in a recent questionnaire and it is hoped that the wider body of the BSG will embrace this initiative. The potential benefits of the Registry are enormous and the project is being viewed with considerable interest in other countries. We will try to ensure that the work involved for individual gastroenterologists is minimised as far as possible and your support in this exciting project is earnestly requested.

Please contact either of us for further information or with any comments.