LETTERS TO THE EDITOR

Liver biopsy under ultrasound control

Editor,—I read the recent occasional viewpoint by Shah et al (Gut 1999;45:628–629) with much interest. The authors describe their regional practice of mandatory real time ultrasound guidance for percutaneous liver biopsy in all cases of suspected diffuse liver disease. However, the published literature does not convincingly support the universal adoption of such a policy.

The only recently published study cited in support of their protocol, by Lindor and colleagues,1 is open to a number of methodological criticisms. In particular, in an unspecified proportion of the patients randomised to ultrasound guidance, the procedure was not actually performed under ultrasound guidance and was instead immediately preceeded by a “biopsy room” ultrasound scan. The net result of this may have been to selectively raise the pre-biopsy scanning rates in the “ultrasound” cohort who were already actively raising the pre-biopsy scanning rates in the respective groups).

In terms of the reduction in post-biopsy complications claimed by Lindor et al, the major impact was a reduction in hospitalisation of a “safer” guided scan or the potential reference in the rates of bleeding or hypotension. The reduction in pain, in a non-blinded study, could have been due to several factors such as the patients’ perceptions of a “safer” guided scan or the potential for the physicians to more readily hospitalise patients with abdominal pain in the “blind” group.

There is considerable published data available regarding the safety of percutaneous liver biopsy without real time ultrasound guidance.22 Indeed, the British Society of Gastroenterology’s recent guidelines do not advocate changing from the practice of pre-procedural ultrasound scanning (which is part of the routine investigation of most patients with suspected hepatic disorders anyway) to biopsies performed exclusively by radiologists under imaging control and it is difficult to see how adopting such a policy nationally could be justified.

Finally, I would urge that too much gravity is not placed on the cited abstract regarding a survey in which 75% of British gastroenterology trainees requested formal training in ultrasoundography. The performance of sufficient procedures to be certified competent in this radiological procedure and to remain so at day to day clinical practices and the move towards structured training of junior doctors is part of these developments. Clearly there is a need to train gastroenterologists in endoscopic techniques—the need is no less for the practice of liver biopsy. “See one, do one, teach one” is an aphorism that will not stand up in the blind biopsy group (p=0.07). Simply stating that this last finding, which had a twofold importance in the ultrasound group compared with nine in the blind biopsy group (p=0.04), pain being the reason for admission in seven patients and pain plus hypotension in four. Bleeding occurred in nine patients in the ultrasound group versus 18 in the blind biopsy group (p=0.07). Simply stating that this last finding, which had a twofold difference between the groups was not significant and by implication not important, ignores what might be a very relevant trend, which did not reach the “magical” p<0.05 level due to insufficient numbers (that is, a type II error). As stated in our paper, a similar situation is probably relevant in the failure of studies to show significant differences in mortality due to the large numbers required.

Clinical procedures are now the subject of appropriate monitoring. When clinicians fall below standard and imperil the safety of the patient, questions of competence are raised. The current concern about the safety of cardiac surgery has raised public awareness of the need for adequate training in all clinical procedures. The GMC and other professional bodies are looking at all aspects of day to day clinical practices and the move towards structured training of junior doctors is part of these developments. Clearly there is a need to train gastroenterologists in endoscopic techniques—the need is no less for the practice of liver biopsy.


Reply

Editor,—The technique used in the Lindor paper was somewhat of a hybrid between the “X marks the spot” (site usually marked in the ultrasound group but transferred to the ward for the procedure) and real time ultrasoundography performed in the department under continuous visualisation. In their paper, Lindor and colleagues performed an ultrasound immediately before performing the procedure within the department. Using Lindor’s method, the patient may move prior to biopsy, and intrahepatic vessels cannot be avoided. It is therefore an inferior technique compared with using the “real time ultrasound guided biopsy” method recommended by us. Nevertheless, the relevant statistical analyses from their study were as follows: two patients required hospitalisation in the ultrasound group compared with nine in the blind biopsy group (p>0.04), pain being the reason for admission in seven patients and pain plus hypotension in four. Bleeding occurred in nine patients in the ultrasound group versus 18 in the blind biopsy group (p=0.07). Simply stating that this last finding, which had a twofold difference between the groups was not significant and by implication not important, ignores what might be a very relevant trend, which did not reach the “magical” p<0.05 level due to insufficient numbers (that is, a type II error). As stated in our paper, a similar situation is probably relevant in the failure of studies to show significant differences in mortality due to the large numbers required.

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Informed consent

Editor,—The phrase “informed consent” falls so readily from the pen that it is easy to forget that two distinct processes are involved: firstly, providing appropriate information and then obtaining consent from the patient. In attempting to combine these two steps, Shepherd and colleagues (Gut 2000;46:37–39) remove some of the patients’ essential safeguards. As stated in their paper, “patients in whom a blind biopsy has led to . . . one” is an aphorism that will not stand up in the blind biopsy group (p=0.07). Simply stating that this last finding, which had a twofold difference between the groups was not significant and by implication not important, ignores what might be a very relevant trend, which did not reach the “magical” p<0.05 level due to insufficient numbers (that is, a type II error). As stated in our paper, a similar situation is probably relevant in the failure of studies to show significant differences in mortality due to the large numbers required.

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EDITOR,—The booklet for consent has been designed and implemented as a practical way of addressing all of the issues that surround obtaining informed consent. As well as endoscopy, their example is relevant to other services offering invasive open access procedures, especially radiology. Their booklet addresses three problems: (i) that information regarding proposed procedures should be given in circumstances in which patients could not be perceived to be under duress to give consent; (ii) that the information is given, albeit indirectly, by one who is trained to perform the procedure; and (iii) that an explanation is given regarding risks as well as benefits, as is often not the case at present.

Neale’s commentary (Gut 2000;46:37–39) is, as one would expect, in many ways equally perceptive but he fails to take account of an essential aspect of open access services. As he makes clear, such a process of informing consent cannot address the problem of informing choice. The patient’s opinion and the information arrives through the post with an appointment for a particular procedure. However desirable it may be that such a choice should be an integral element of informed consent, the nature of an open access service dictates that the decision regarding the choice of the procedure must have been taken prior to the referral having been made. This raises two further issues: (1) how to ensure appropriate judgment is used to decide the choice of the procedure; and (2) how to assess an acceptable level of risk for open access procedures in general and for the particular individual to whom a procedure is offered.

Neale’s example of ERCP, although not generally an open access procedure, serves to focus thinking about these unanswered questions but does not diminish the contribution of Shepherd and colleagues in enhancing the quality of information given to patients. The ratio of manpower to demand means that, for the foreseeable future, much as endoscopists may wish to sign consent” at home is not. He cites GMC advice that “where endoscopists and patients vulnerable. Protocols for endoscopy remain a subject for debate. It is foreseen many ago that once an open access endoscopy service was made available it would become a high volume service, which can leave both endoscopists and patients vulnerable. Protocols for endoscopy have been in place for a short time selection but they are not always available. We think it must be regarded as a minimum standard of care that the consent obtained for these procedures is as informed as it can possibly be made, within the practicalities of such a high volume service. Furthermore, we suggest that this booklet is the first to openly address this problem and that, judging by the response the authorship has had, many other colleagues throughout the country agree with our approach.

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Reply

EDITOR,—Thank you for allowing me to see the correspondence regarding “informed consent”. Dr Bennett states that writing to inform a patient of what is involved in “open access” gastrointestinal endoscopy (including risks and benefits) is desirable but requesting patients to “sign consent” at home is not. He cites GMC advice that: “where endoscopy cannot be an isolated event. It involves continuing dialogue between you and your patients... you should give... the patient time to ask questions.” In contrast, Dr Bruce states that the reservation of manpower to demand (for gastrointestinal endoscopy) means that much as endoscopists may wish to speak with their patients about... (this) would impose unacceptable delays in management.

In writing a commentary on informed consent I did not attempt to resolve these difficulties. As was stated in the BSG guidelines on informed consent, “In busy clinical practice it is not possible to satisfy NHS guidelines meticulously but I always try to recognise the difficulties... Each unit must develop a code of practice suitable to its mode of operation...” The law takes the view that the responsibility for obtaining informed consent lies with the endoscopist who is to perform the procedure. ..But as the GMC concedes, “Where this is not practicable you may delegate (this responsibility)... to a person who is suitably trained and qualified; has sufficient knowledge... and understands the risks...”

The difficulty with open access endoscopy lies in the shared responsibility. The GP has assessed the patient and usually remains responsible for the patient’s care. I assume that consultant gastroenterologists who offer open access endoscopy instruct participating GPs carefully regarding indications, alternatives, risks, and potential benefits, thereby delegating responsibility. And as Shepherd and colleagues (Gut 2000;46:37–39) make clear, patients are not “pressed” to sign the consent form at home; they have the option not to sign until they have discussed the procedure with the endoscopist. Moreover, if the BSG guidelines are followed “...a qualified nurse should check the level of understanding and provide further explanation if open access endoscopy should deal with any last minute questions”.

Meanwhile, the value of open access endoscopy remains a subject for debate. It has been suggested that a one-stop dyspepsia clinic is a preferable means of practice. Such practice overcomes the problem of gastroenterologists “not speaking with patients about options”.

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Increased prevalence of methylenetetrahydrofolate reductase C677T variant in patients with IBD

EDITOR,—We read with interest the paper by Mahmud et al (Gut 1999;45:389–394). The study showed an increased prevalence of methylenetetrahydrofolate reductase (MTHFR) C677T variant in patients with inflammatory bowel disease (IBD). The C677T polymorphism is a known genetic cause of mild hyperhomocysteinaemia (hyper-Hcy) and may be associated with a variable degree of risk for thromboembolic disease in patients with IBD.

To confirm a higher prevalence of the C677T polymorphism, we investigated 99 patients with established IBD for this polymorphism compared with 1084 unselected newborns. DNA samples were genotyped for the MTHFR (C677T) mutation. Patients were categorised as homozygous for the thermolabile variant (TT), heterozygous for the wild-type variant (CT), or homozygous for the wild-type (CC).

In a difference in prevalence between IBD patients and controls was compared using the chi-squared test. Differences in onset of disease between patients with Crohn’s disease (CD)
and those with ulcerative colitis (UC) were compared using the Mann-Whitney test. A total of 16.2% (16/99) of IBD patients were homozygous for the C677T variant compared with 8.3% (90/1084) in the control group. This difference was statistically significant (p<0.0001). When patients were stratified according to CD and UC, we found that homozygosity for the MTHFR C677T variant (TT) was present in 14.0% (7/50) of patients with CD and 14.8% (9/62) of those with UC. Both results were independently significantly higher than in the background population.

Onset of disease in carriers of the (TT) variant in CD and UC was 33.8 and 40.6, respectively, compared with 34.4 and 43.3 in non-carriers. This difference was not statistically significant. There was no correlation between disease activity indices of the IBD patients (Crohn’s disease activity index for CD and clinical activity index for UC) and carriers of the (TT) variants. Also, C reactive protein levels in IBD patients was independent of MTHFR gene prevalence.

Genome wide linkage screen of a large population of IBD patients found evidence of linkage of IBD to the short arm of chromosome 1 in all families investigated. It is interesting that the MTHFR gene is located on chromosome 1 (1p36.3). Additional loci on chromosomes 3, 7, and 16 are linked to IBD. The genetic basis of IBD is non-mendelian in nature and very complex. Unrecognised factors may therefore be important in the aetogenesis of IBD. Further investigation of other factors is being carried out in our laboratory at present.

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2 Cattaneo M, Vecchi M, Zighetti ML, et al. Genetic risk factor for vascular disease: a common mutation in methylenetetrahydrofolate reductase, methionine synthase, and cystathionine synthase. Accordingly, it is important to emphasise that all patients with IBD should receive regular therapy with 400 μg of folic acid daily.

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BOOK REVIEWS


Pediatric gastroenterology, and our knowledge about diseases of the small intestine in children, has grown rapidly over the last few years, owing to advances in the basic sciences, such as molecular genetics and, particularly, gut immunology. The purpose of this book is to provide the consultant paediatrician, as well as the trainee, with a review of the diseases of the small intestine in children. There are two major sections in the book: the first, more general, is focused on structure and function; and the second one, is a proof of this special compactness of pouches and Crohn’s disease. This is a comprehensive and well illustrated book that will be a welcome addition to the shelves of specialists in IBD surgery.

N MORTENSEN


This is a substantial book edited by Dr Michael Wolfe with six of his colleagues acting as section editors. Many of the hundred or so contributors are members of the Boston home team. The others are from the key centres in North America with a scattering of contributors from Canada, Europe, Israel, and South America. This is in effect a GI textbook, but stripped largely of pathogenesis, pathophysiology, diagnosis, and differential diagnosis. Five main sections consider treatment of oesophageal, gastroduodenal, pancreatic or biliary, hepatic, and intestinal diseases.

The two column black and white presentation is relieved by good summary tables, with small clear diagrams and figures within the two column format. No flashy colour or bullet points here, but good solid information. Clear instructions to the contributors and careful editing has produced consistent and well balanced chapters. For example, the excellent contribution from Stephen Hanner deals briefly with an approach to history taking, physical examination, diagnostic studies, and laboratory investigation in patients with inflammatory bowel disease. This is followed by an overview of individual patient especially useful. Overall, the editorial quality of the book is high.

In conclusion, this book is a very valuable reference not only for paediatric gastroenterologists, but also for general practitioners, medical students, and dieticians.
management and then the “meat” of the chapter reviews therapeutic options for ulcerative colitis and Crohn’s disease. The approaches to treatment in North America and in Europe were remarkably similar. International journals and meetings have narrowed the Atlantic Ocean to a trickle.

The chapter on non-variceal GI bleeding by Lichtenstein also provides remarkably consistent intercontinental advice, which is practical and appropriate and wherever possible evidence based. The detail is remarkable—for example, he has researched the history of iced saline lavage and concludes that water at room temperature is perfectly acceptable!

I particularly liked the section on therapeutic endoscopy, which is a model of clarity and brevity.

Whichever chapter is selected, the information is consistent, reliable, and well researched. The chapter by Nicholas La Russo on primary sclerosing cholangitis opens with an excellent and brief review of the genetics, pathogenesis, clinical features, diagnosis, and natural history, and then considers potential therapy of cupruresis, immunosuppressant agents, antifibrogenesis, cholestatic agents, surgery, and transplantation. Even in complex areas such as the contribution by John Del Val, concerned with the treatment of neuro endocrine tumours, for each specific syndrome there is a crisp, clear summary of recommended treatment.

In summary, this is a remarkable, formidable achievement with consistent structure and advice, which is reliable and well based. Inevitably for a book of this size, the turnaround time results in the latest references running back to 1997, so computer based systems will be needed to bring the reader up to date.

What of the next edition? This would be an ideal CD-ROM based book with regular updating. Many of the older references could be stripped out to make way for the new, and if we are still buying textbooks then layout and presentation will need improvement.

If you need a guiding hand and expert advice for the treatment of any digestive disorder, this is the book for you.

R N ALLAN


Kurt Isselbacher’s foreword to this volume indicates that it was not written for the medical specialist, but rather for the family practitioner and general internist. True, this is not YAMADA. Nevertheless, despite being unfocussed and weighing in at only one quarter of the size of this gold standard text, I believe he is inappropriately modest on behalf of the editors and authors. Although a specialist readership may not have been the primary target, those involved in the daily care of alimentary tract and hepatic diseases will find this book an invaluable addition to the departmental shelves.

The format is that now commonly adopted for digestive disease textbooks—that is, an initial section dealing with presenting clinical features followed by organ based accounts of specific diseases and syndromes. The final chapters are more broadly based, covering systemic complications of drug therapy, and nutritional support. The emphasis is on presenting the current aetiopatho-
genic concepts of hepatic, pancreatic, and gastrointestinal diseases and their management, whilst historical and epidemiological perspectives are dealt with more briefly.

The editorship is in the hands of five very influential European, and only 15 of the 103 authors are from the British Isles. Eurosceptics might be concerned that with a list of authors resembling a Chelsea team sheet, the resulting product might be an uncomfortable read with limited relevance to British practice. Nothing could be further from the truth. The text flows easily, which is a great credit to those authors not writing in their first language. The chapters have a remarkable uniformity of structure, perhaps not surprisingly as this can be readily imposed by the editors, but also of quality, which is predictable in light of the distinguished authorship, and of style. The last of these can have been achieved only by diligent editorial skills, and, I suspect, extensive rewriting. Although the authors are predominantly European, the spelling and approved drug names are from the opposite side of the Atlantic—a concession one assumes to the major potential market.

Mercifully, guidelines and patient care pathways are not favoured, whilst algorithms are sparingly dispersed. By contrast, the text is regularly punctuated with summarising tables and figures. These will be of particular interest to junior readers preparing their Power-Point presentations. Hard pressed consultants will be no less enthusiastic, as the book provides a resource for rapid but comprehensive “revision” prior to a training session with the junior staff.

The chapters covering large bowel polyps and colorectal cancer will be of special value and interest to non-surgeons who have kept abreast of the last decade’s developments in the classification and management of these tumours. Recommendations for endoscopic surveillance are discussed, though the authors admit that not all of these are fully supported by adequate evidence yet. Similarly, non-specialists requiring a review of liver transplantation and its place in the final year of the millennium, will be grateful to Ringe and his colleagues for their adroit contribution. The account of ulcerative colitis is a medicosurgical collaboration, which is a feature of many chapters. Medical therapeutic options are fully discussed, but one gains the impression there may be a lower threshold for elective surgery in German centres than in the United Kingdom. This, however, is a rare example of the possible divergence between British and continental practice. Neville and Axon offer a balanced account of non-ulcer dyspepsia, but, regrettably, the editors have not taken the opportunity of giving this confusing termi

ology the red card. My men of the match are the Oxford trio for their chapter covering Crohn’s disease. I doubt there is a better succinct account currently in print.

A minor criticism is the rarity of speculation about future developments. It would surely have been timely to have made a few forays into the new millennium.

Although this book may not be in the champions’ league class, it is a thoroughly prestigious performance by a team that constantly has its eye on the ball.

The last dinosaur disappeared from Earth over 66 million years ago, wiped out in some cataclysm that changed the world and its climate for ever.

M J LANCASTER SMITH


The last dinosaur disappeared from Earth over 66 million years ago, wiped out in some cataclysm that changed the world and its climate for ever.

Mankind gradually evolved, competing in a hostile environment, winning because of brain and hands. Knowledge and writing gave power; mankind strode on, erect, dignified. The pinnacle of hand-eye coordination, thoughtful and wise, stepped forth the surgeon.

Evolution continued, specialising, improving, learning, until from the chrysalis emerged the ultimate epiphany, a colorectal surgeon. Hungry, needing to learn, to understand the background, the proud evolution, the way of the tribe.

How to learn? Vast, illuminated, biblical scroll, or virtual, instant, ephemeral quantum world? Wonderful, mushy smell, comforting weight, swishing flick of page, light low, old knowledge enters old eyes, stimulates old satisfaction, reveals new comprehension. But taut skin, restless energy, young ambition seeks flickering screen, a virtual world. A conundrum.

I am old, and thinning; a user of computers, but no bedfellow. At the frontier, I use journals and the library; for reading, smaller books, concise, portable, incisive. However, for reference, to support an opinion, pursue a prejudice, grind an axe, to gain say, then a large, lovingly written, luxuriously arranged book—a book and a half (indeed, two books); beautiful, admired, essential—just such books as these.

But I feel a gulf. I sit on the written side of that gulf, but close by I see a new generation, turning away, evolving further. Will they want such a book? There is no CD-ROM. Will they use other ways?

Although science changes rapidly, society and culture take much longer to adjust. Reading and book owning are as much a cultural as they are efficient means of imparting knowledge, pleasantly, savouringly, to be admired also on the shelf. I am confident they will read, they will own books, big books, books such as these books—fascinating, informative, a congratulation, and not the last dinosaur.

ROBIN PHILLIPS

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R J ASPINALL

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