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 prospective randomised 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 direct guidance and was instead immediately preceded 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 more likely to have been previously scanned than the “blind” patients (76–78% v 67–68% 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 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.2,3 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 control4 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 ultrasonography. The performance of sufficient procedures to be certified competent in this radiological procedure and to remain so is undoubtedly useful but it does not replace the over-riding need for doctors to speak with their patients... “If you are the doctor... undertaking an investigation it 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 1995;36:457–460) points out in his gentle and thoughtful comment...”

Neither the paper nor the commentary cite the GMC advice5 although they are quoted extensively in the British Society of Gastroenterology guideline on informed consent for endoscopy procedures. Particularly relevant is this: “obtaining informed consent cannot be an isolated event. It involves a continuing dialogue between you and your patients... you should give... the patient time to ask questions”.6

However carefully prepared, a booklet cannot be appropriate for every patient and every circumstance. Pressing patients to “sign consent” in advance of meeting any endoscopy staff is to deprive them of the opportunity to ask questions or seek reassurance. “If you are the doctor... undertaking an investigation it is your responsibility to discuss it with the patient...” although the job may be delegated to an appropriate person.

Giving information by post is desirable: “Giving information by post is desirable:...”

ENDNOTES


Reply

Editor,—The technique used in the Lindor paper was somewhat of a hybrid between the “X marks the spot” (site usually marked in ultrasound dermatology and the patient transferred to the ward for the procedure) and real time ultrasonography 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 implication and by implication not important, 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 1995;36:457–460) points out in his gentle and thoughtful comment, “written information... is undoubtedly useful but it does not replace the over-riding need for doctors to speak with their patients...”. Neither the paper nor the commentary cite the GMC advice although they are quoted extensively in the British Society of Gastroenterology guideline on informed consent for endoscopy procedures. Particularly relevant is this: “obtaining informed consent cannot be an isolated event. It involves a continuing dialogue between you and your patients... you should give... the patient time to ask questions”.

ENDNOTES

EDITOR,—Shepherd and colleagues (Gut 2000;46:37–39) offer a timely and thoughtful contribution to the increasingly loud debate on the appropriateness of addressing all of the issues that surround informed consent. In writing a commentary on informed consent for endoscopic procedures, Dr Neale’s commentary, we think misses the point entirely. We would impose unacceptable delays in management.”


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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 a higher 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).

Difference in prevalence between IBD patients and controls was compared using the χ^2 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 18.4% (9/49) 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 patients 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 clinic activity index for UC) and carriers of the (TT) variants. Also, C reactive protein levels in IBD patients was independent of MTHFR gene prevalence.

A 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 IB. The genetic basis of IBD is non-mendelian in nature and very complex. Unrecognised factors may therefore be important in the pathogenesis of IBD. Further investigation of other factors is being carried out in our laboratory at present.

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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 mechanisms; the second, more specific, is in which attention is paid to the commoner and more important specific disease entities. This fourth edition of a book published in the past by John Walker Smith, and now coauthored by Simon Murch, reflects the long clinical experience of the first author. At the same time, it offers a thorough review of the most recent literature. The long clinical experience of the senior author, which is particularly evident in the chapter dedicated to infectious gastroenteritis, is now integrated by the strong clinical and research interest of Dr Murch in mucosal immunology. The value of the chapters dedicated to matrix (a topic to which Dr Murch has significantly contributed with his own research), and to the immune system of the small intestine in the first section of the book, and to coeliac disease and Crohn’s disease in the second one, is a proof of this special competence. Also very good is the chapter on laboratory assessment, although less convincing is the part of the same chapter that discusses the chief symptoms of the child with gastrointestinal problems (diarrhoea, vomiting). The appendix on special milks is 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.

R TRONCONE


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 smattering of contributors from Canada, Europe, Israel, and South America. This is in effect a GI textbook, but striped 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 Hanauer 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 medical students, and dieticians.

R TRONCONE


I enjoyed looking at this book. The editors’ intention is that “at a moment’s notice the surgeon may open it and consult an authority on a particular topic related to IBD surgery”. They have assembled an international group of contributors and there are excellent sections on history, surgical pathology, pouches, and Crohn’s surgery. There are some surprising omissions, however. A chapter on revision surgery for pouches that have gone wrong would have been timely, and a more thorough review of balloon dilatation and stents would have provided a look to the future. I think the sections on septic complications of pouches and Crohn’s disease should have been kept separate.

I was irritated by the lack of uniformity in the illustrations and drawings of procedures, and in places the text is very dense, for example, in the section on ileostomy.

A final point: there is only one chapter on medical management just when there is an explosion of new medical therapy. Joint physician/surgeon management is seen by many as the ideal, and surgical treatment cannot be viewed in isolation. Yet this is a comprehensive and well illustrated book that will be a welcome addition to the shelves of specialists in IBD surgery.

N MORTENSEN
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 aspects 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 eminent continental Europeans, and only 15 of the 103 authors are from the British Isles. Euro sceptics might be concerned that with a list of authors representing 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 dis-
tinguished authorship, and of style. The last of these can have been achieved only by dili-
genent editorial skills, and, I suspect, extensive rewriting. Although the authors are predomi-
nantly 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 doctors preparing their Power-
Point presentations. Hard pressed consult-
ants will be no less enthusiastic, as the book provides a resource for rapid but comprehen-
sive “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 failed to keep abreast of the last decade’s develop-
ments 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 contrib-
tution. 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 Ger-
man centres than in the United Kingdom. This, however, is a rare example of the possi-
bile divergence between British and continen-
tal 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 suc-
cinct account currently in print.

A minor criticism is the rarity of specula-
tion about future developments. It surely would 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 premiership performance by a team that con-
stantly has its eye on the ball.

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 cli-
mate 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 sur-
geon.

Evolution continued, specialising, improv-
ing, learning, until from the chrysalis emerged the ultimate epiphany, a colorectal surgeon. Hungry, needing to learn, to under-
stand the background, the proud evolution, the way of the tribe.

How to learn? Vast, illuminated, biblical scroll, or virtual, instant, ephemeral quantum world? Wonderful, musky smell, comforting weight, swishing flick of page, light low, old knowledge enters old eyes, stimulates old satisfac-
tion, 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 comput-
ers, 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 gainays, 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 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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Liver biopsy under ultrasound control

R J ASPINALL

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