

- tures in liver transplant patients. *Br J Rheumatol* 1994; 33: 52-5.
- 5 Skingle SJ, Huang C-C, Greer S, Alexander GA, Compston JE. Post-transplantation osteoporosis: evidence for parathyroid hormone-induced bone loss. *Bone* 1995; 17: 325.
 - 6 Huang C-C, Greer S, Allison M, Skingle S, Alexander GA, Compston JE. Mechanisms of bone loss following liver transplantation [abstract]. *Bone* 1996; 19: 700.
 - 7 Eastell R, Dickson ER, Hodgson SF, Wiesner RH, Porayko MK, Wahner HW, et al. Rates of vertebral bone loss before and after liver transplantation in women with primary biliary cirrhosis. *Hepatology* 1991; 14: 296-300.
 - 8 Hawkins FG, Leon M, Lopez MB, Valero MA, Larrodera L, Garcia-Garcia I, et al. Bone loss and turnover in patients with liver transplantation. *Hepatogastroenterology* 1994; 41: 158-61.
 - 9 Hussaini SH, Stewart SP, Roman F, Oldroyd B, Bramley P, Simpson M, et al. Osteopenia after liver transplantation: an over-estimated risk? *Gut* 1995; 36 (suppl 1): A20.

Reply

EDITOR,—The message from our leading article was not to underestimate bone disease after liver transplantation, but to put the problem in perspective with regard to the current practice of liver transplantation. We do not deny that bone disease after transplantation remains a problem. None the less, we suggest that with better selection of patients for liver transplantation, shorter hospital stays and the use of steroids in lower dosages, with steroid withdrawal in some programmes, there is a lower morbidity associated with post-transplantation bone disease compared with a decade ago.

We agree that bone fracture is an important endpoint with regard to post-transplantation bone disease. However, we suggest that symptomatic bone fracture is the most important endpoint for the morbidity related to post-transplantation bone disease. Thus, the paper by Hawkins and co-workers, although possibly underestimating asymptomatic spinal fractures, does accurately reflect the rate of symptomatic fractures after transplantation. In our own series (unpublished data) the rate of symptomatic bone fractures was low, with only eight (14%) of 54 patients experiencing fractures. One patient experienced a fracture of the lumbar spine; the remaining patients had femoral neck fractures. We agree that as all patients did not undergo systematic axial and spinal screening radiology, we may have underestimated the rate of asymptomatic fractures. None the less, a fracture rate of 14% is substantially lower, compared with 65% of patients sustaining atraumatic fractures in the first three months after transplantation.¹ Thus, the combination of a low symptomatic fracture rate combined with a reduction in the loss of bone mineral density, compared with earlier studies, leads to the suggestion that post-transplantation bone disease is "less of a problem".

We concur that bone disease and fracture after liver transplantation are still important contributors to post-transplant morbidity and thus warrants further research. However, we emphasise further the need to re-assess the magnitude of the problem, in the light of current clinical practice.

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¹ Eastell R, Dickson ER, Hodgson SF, Wiesner RH, Porayko MK, Wahner HW, et al. Rates of vertebral bone loss before and after liver transplantation in women with pri-

mary biliary cirrhosis. *Hepatology* 1991; 14: 296-300.

BOOK REVIEWS

Bile ducts and bile duct stones. Berci G, Cuschieri A. (Pp 179; illustrated; £80.00.) Philadelphia: WB Saunders, 1996. ISBN 0-7216-1488-4.

My first reaction on receiving this book was "Not another book on bile duct stones". I flicked through the pages and remarked to myself on the large numbers of black and white radiographs of the biliary tree taken by all kinds of techniques: laparoscopy and ERCP in particular. There were also quite a few colour photographs principally taken during laparoscopy which could have been of better quality. I scanned one chapter and noted three things that irritated me: the author consistently confused the common bile duct with the common hepatic duct and "C with "F; the most irksome was to refer to radiological contrast as a "dye" (visions of my teenage children and what they do to their hair).

I put the book to one side.

Later, I went through the list of the 24 multidisciplinary contributors drawn principally from North America but also Europe, Australia and South Africa - it was a distinguished list. I began to feel this book might be useful after all. After digesting several chapters (I rarely read a book in sequence), I realised that my initial unfavourable impressions were misplaced.

Gastroenterologists frequently give the view that the therapeutic revolution of bile duct stones with the widespread introduction of ERCP was final. But then at one point (only five years ago) ESWL was believed to be the answer to gallstones before laparoscopic cholecystectomy was developed. Then, slowly there emerged laparoscopic bile duct exploration. Many surgeons viewed this as a gimmick. Moreover, gastroenterologists often castigated the innovative surgeon for spending two to three hours undertaking a laparoscopic choledocholithotomy when this could be done by ERCP in 'five minutes'. Any such negative views are effectively destroyed by this book.

For the 'theoretical' gastroenterologist, this book defines multiple areas in which ERCP should be used and brings together powerful arguments for the primary use of laparoscopic bile duct exploration (notwithstanding the established roles of ERCP in acute cholangitis and in acute pancreatitis, in elderly unfit patients and in patients with a repaired or recurrent bile duct stone). For the surgeon, it is an outstanding technical manual.

For the practising gastroenterologist, it is extremely valuable in helping to understand the kind of problems that may be created by laparoscopic surgery when called upon to contribute diagnostically or therapeutically by ERCP (as well as defining the roles of other imaging modalities such as computed tomography scanning).

The references are remarkably up to date and highlight the enormous advances and accelerating worldwide experience in laparoscopic bile duct surgery. This book needs to be read by every trainee and every surgeon undertaking surgery for gallstones. Several chapters alone

("The role of preoperative ERCP and sphincterotomy in the laparoscopic era", "The unsuspected bile duct stone", "Preoperative endoscopic sphincterotomy", "Management of retained stones", "Early diagnosis of bile leakage", "Endoscopic management of postoperative bile leaks", and "A cost-effective approach to the treatment of common bile duct stones with surgical versus endoscopic techniques") also make this book a must for practising gastroenterologists.

J P NEOPTOLEMOS

MR Cholangiopancreatography Techniques. Results and Clinical Indications. Edited by P Pavone, R Passariello. (Pp 150; illustrated; DM 148.00.) Berlin: Springer Verlag, 1997. ISBN 3-540-61349-8.

Magnetic resonance cholangiopancreatography (MRCP) is relatively new diagnostic investigation that is becoming quite rapidly used in clinical practice. This book aims to convey details of the techniques, results and clinical indications. This is quite a challenge given the rapid progress that is occurring both in techniques and clinical evaluation of MRCP, and the information presented is a distillation of current published work combined with a good measure of the personal experience and views of the authors.

By and large, their aims are achieved in a series of short chapters that discuss the details of the various MRCP techniques in current use and the place of MRCP in most clinical situations. Only MR radiologists are likely to benefit from the physics and techniques chapter, but the other chapters are more widely accessible. The evaluation of jaundice is the area most studied using MRCP and the potential to replace diagnostic ERCP in many situations is illustrated. This is reinforced in the chapter on choledocholithiasis which puts MRCP in the context of other diagnostic tests, although I was surprised to find no discussion of CT contrast cholangiographic methods. Benign and malignant biliary stenoses are well covered and the particular diagnostic advantages of MRCP in "mapping" the biliary tree well illustrated. Pancreatography receives less attention, reflecting the problems of spatial resolution and of correlating anatomical changes with clinical features of pancreatitis, although pseudocyst demonstration by MRCP may well be of value in clinical practice. The value of MRCP in relation to laparoscopic cholecystectomy is appended somewhat as an afterthought and this is an area still lacking in large trials, preventing proper evaluation.

Strong points are the copious good quality illustrations and the numerous up to date references. A debatable point is the emphasis on the particular technique that the authors have used although this does not detract from their overall conclusions. The not infrequent grammatical, translation and spelling errors are irritating and can make the text somewhat challenging to read. An additional chapter on the potential limitations of the technique would have been helpful for the clinician and some feel for the likely future technical developments such as 3D breath-hold and dynamic functional studies would have been useful. Overall, this is a timely snapshot overview of a new diagnostic technique that will be of value to those involved in the investigation and management of pancreatic and biliary disease.

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