- 3 Greenstein OS, Rubesin SE, Jones B, Fishman EK, Bayless TM, Siegelman SS. Computed tomography vs barium studies in the acutely symptomatic patients with Crohn's disease. *J Comput Assist Tomogr* 1987; 11: 10-9-16.
- 4 Gore RM, Cohen MI, Vogelzang RL, Neiman HL, Tsang TK. Value of computed tomography in the detection of complications of Crohn's disease. *Dig Dis Sci* 1985; 30: 701-9.

Reply

EDITOR,—We thank Dr Kolkman *et al* for their letter about our paper on the clinical relevance of technetium-99m labelled granulocyte scintigraphy in Crohn's disease (*Gut* 1993; 34: 1364-9), not only for their positive considerations but also for the criticisms that give us the opportunity to clarify them.

Firstly, the problem of differentiation between ileum and ascending colon in the case of a hot spot in the right iliac fossa. In difficult cases, the scintigraphic study is done for 24 hours so the whole colon is visualised by labelled granulocytes eliminated in the lumen and so correctly attributes the scan image to the ileum or the colon.

The main point concerns Crohn's disease complications, abscesses and fistulas. In our work not all patients have been checked, so the term 'accuracy' is not statistically correct. But the systematic research of abscesses was not a goal of the study and so we started from the clinical suggestion of complication to perform computed tomography. In this subgroup of patients a positive scan for abscess or fistula had a 100% accuracy.

Scintigraphic differentiation between abscess and fistula is made on serial images, to see anomalous stabs between intestinal loops or between intestine and adjacent tissues. The 24 hour scan was necessary in 45 patients. The examinations to confirm the complications (see the text) were performed in patients with clinical suggestions of the complications and not only in cases with a positive scan. We agree that computed tomography is more accurate for the screening of abscesses: in the methods section we say: 'when abscess or fistula complications were suspected, the final diagnosis was based on computed tomography ...', and this sentence is quite similar to the conclusion in Dr Kolkman's letter.

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Benign intracranial hypertension

EDITOR,—We read with interest the report of two patients who developed so called benign intracranial hypertension (BIH) during episodes of inflammatory bowel disease (IBD) treated with corticosteroids, but would argue that the corticosteroids were probably not to blame (*Gut* 1994; 35: 423-5). It is increasingly realised that BIH is a syndrome rather than a specific diagnosis, and that the most common identifiable underlying cause is cerebral venous thrombosis. This may affect either the major dural venous sinuses or the superficial cortical veins, and can present with either the syndrome of BIH or focal deficit resulting from venous infarction. There is a well recognised association between IBD and cerebral venous thrombosis.¹⁻⁵ This probably

reflects a general tendency to thrombosis in IBD rather than the effects of treatment: certainly cases have been reported where corticosteroids were not prescribed¹⁻³ or had been completely withdrawn (as described by Jackson *et al*⁵ and the authors in a paper recently submitted for publication).

Indeed it must be asked whether there really is a genuine association between BIH and corticosteroid treatment. Many of the other diseases that are treated with corticosteroids are also themselves thrombophilic. An example would be the recent report of BIH in a patient with corticosteroid treated nephrotic syndrome, where the BIH resolved with anticoagulation.⁶

The diagnosis of cerebral venous thrombosis is not excluded by a normal brain scan with computed tomography; this requires either magnetic resonance brain scanning with special angiography sequences or conventional cerebral angiography. Our policy is to pursue these detailed investigations in patients where the syndrome of BIH is accompanied by a thrombophilic disorder, particularly as there is increasing evidence that anticoagulation may be a useful treatment.⁷

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- 1 Averback P. Primary cerebral venous thrombosis in adults: the diverse manifestations of an underrecognised disease. *Ann Neurol* 1978; 3: 81-6.
- 2 Schneiderman JH, Sharpe JA, Suffon DMC. Cerebral and retinal vascular complications of inflammatory bowel disease. *Ann Neurol* 1979; 5: 331-7.
- 3 Yerby MS, Bailey GM. Superior sagittal sinus thrombosis ten years after surgery for ulcerative colitis. *Stroke* 1980; 11: 294-6.
- 4 Johns DR. Cerebrovascular complications of inflammatory bowel disease. *Am J Gastroenterol* 1991; 86: 367-70.
- 5 Jackson M, Lennox G, Jaspán T, Jefferson D. Cerebral venous and systemic thrombosis in ulcerative colitis. *Cerebrovasc Dis* 1993; 3: 178-9.
- 6 Sakamaki Y, Nakamura R, Uchida M, Saito T, Okajima S. A case of pseudotumour cerebri following glucocorticoid therapy in which warfarin prevented recurrence. *Jpn J Med* 1990; 29: 566-70.
- 7 Einhaupl JM, Villringer A, Meister W. Heparin treatment in sinus venous thrombosis. *Lancet* 1991; 338: 597-600.

BOOK REVIEWS

An Illustrated Guide to Gastrointestinal Motility. Edited by D Kumar, D Wingate. Second edition. (Pp 700; illustrated; £125.00.) Edinburgh: Churchill Livingstone, 1993.

The implication of abnormal gastrointestinal motility in the pathogenesis of common disorders and symptoms has been well established over the past 20 years but the details of measurement and the interpretation of

motility traces remain obscure to all but a few directly involved in the field. While clinicians are often confused about science, non-clinical physiologists may be unaware of the clinical problems that need to be solved.

This book aims to provide 'a concise, practical and fully illustrated account by acknowledged experts of, not only the motor physiology and pathophysiology of the gut, but also methods by which it may be studied'. In this, it most definitely succeeds and, although, with over 700 pages, 'concise' may not be the best description, it is divided up into sections and short chapters, which makes it very readable and easy for reference. Since the first edition, new sections have been added to deal with systems that regulate and modulate gastrointestinal motility and many of the other chapters have been rewritten. Certainly, the editors have collected a very impressive array of internationally acclaimed authors in the field, from different countries and different disciplines. The middle section deals with methods of measuring motility from perfused tube manometry through electrogastrography to computerised wave form analysis. The techniques are described in considerable detail, making it possible to use the book for practical problems of everyday clinical measurement and throughout the book the authors are appropriately critical and not afraid to discuss the problems of measurement and interpretation in this field.

Each chapter is extensively referenced, which is particularly valuable for researchers who wish to read more widely and look up the original sources; and the whole book is extensively illustrated – so well, in fact, that sometimes the text is almost lost! (for example, between pages 105-107 and 109-111). The 40 chapters are divided into seven sections and the excellent index makes reference to the same subject in different chapters easy. The wealth of illustration is reflected in the price.

Although it is always possible for a reviewer to find small details with which they disagree, this book is a mine of information and should be available for reference to all those involved in gastroenterology or in laboratory testing and measurement of motility.

A G JOHNSON

Small Bowel Transplantation. By D R Grant, R F M Wood. (Pp 142; illustrated; £60.00.) London: Edward Arnold, 1994.

The comparative success of parenteral nutrition in the treatment of patients with intestinal failure and the disappointing early results of small bowel transplantation relegated this topic to the backwaters of the transplant world. This is now changing and small bowel transplantation should become an established form of treatment for intestinal failure in the near future. There are many problems still to be resolved, but the progress of research and clinical practice has been comprehensively summarised in this well produced publication.

The book reviews the causes and current treatment options of small bowel failure, experimental animal models used to study small bowel transplantation, the problems of acute and chronic rejection, organ preservation, and the physiology and function of the gut, with particular reference to mucosal defence and bacterial translocation. There is an extensive clinical review of current results