BOOK REVIEWS

Evolving Concepts in Gastrointestinal Motility. Champion M C, Orr W C, eds. (Pp 344; illustrated; £39.50.) Oxford: Blackwell Science, 1996. ISBN 0-86542-944-8.

On the cover of this book one can vaguely make out in shadowy, often blurred, letters terms such as "functional dyspepsia" and "gastroparesis", which is perhaps a true reflection of most practising gastroenterologists' understanding of these rather diffuse topics. There is therefore a need for a book such as this which critically reviews the many important recent advances in this area which have not yet been incorporated into clinical practice.

The editors are to be congratulated in gathering together a distinguished set of authors, as well as putting their contributions in perspective by flanking them with an initial chapter reflecting on the past and a final chapter looking to the future which I much enjoyed. Most of the chapters are detailed accounts, heavily referenced and capable of thoroughly updating anyone with the subject. The only disappointment is the illustrations which in some parts are sparse and of poor quality. The chapters are organised more or less topographically, beginning with a splendid chapter on oesophageal dysmotility. Kahrilas's painstaking analysis of oesophageal manometry shows clearly the existence of transition zones, both between the striate pharyngeal constrictors and the smooth muscle of the oesophageal body, and between the mid and lower third of the oesophagus, with a fall in the amplitude of pressure waves and an increased likelihood of failed peristalsis at these points. Later, there is a lucid account of functional dyspepsia and a salutatory note that many of the insights derived from detailed analysis of dyspeptic symptoms have not reached the undergraduate texts. Thus students are still taught that nocturnal pain is a key predictor of peptic ulcer disease in spite of the fact that this is also a feature in 40% of patients with functional dyspepsia. The latter shares with irritable bowel syndrome the poor correlation between objective measures of motility and symptoms as well as the frequent occurrence of visceral hypersensitivity and pyschosocial abnormalities. Visceral hypersensitivity and how we measure it is probably the area where the greatest advances have been made and it is appropriate that there should be a chapter devoted to this topic. Not surprisingly, the methodological issues dominate as it is apparent that sensory thresholds vary according to the frequency of stimulation, and exactly when the sensation is assessed, owing to adaptive relaxation, sensitisation and habituation which all alter the final perception. All these issues are discussed with frequent references to recent literature.

I particularly enjoyed reading the chapter on the irritable bowel syndrome. Dr Thompson is frank about the areas of ignorance and provides an excellent summary of current thinking. His attitude to the condition is refreshing as the following quote illustrates: "A condition affecting at least 11% of a physically healthy population may be no disease at all. Rather the IBS may represent a normal response of the gut to its environment, made more or less prominent in an individual's consciousness by his or her fears or psychological state". There is a good discussion of the importance of psychosocial issues and the response of pain to tricyclic antidepressants even in the absence of overt depression.

The excellent chapter on pseudo-obstruction has an important message which is to recognise that this is a very rare condition which should not be overdiagnosed. Dr Quigley cautions against broadening the term to include manifestations of dysmotility other than those suggestive of intestinal obstruction. He also warns against accepting the diagnosis based on abnormal small bowel manometry alone as this is likely to overlap considerably with the irritable bowel syndrome in which abnormal manometry is well recognised.

Sleep has an important, often neglected, influence on the gut so it is good to see a whole chapter devoted to this topic. This deals for the most part with gastro-oesophageal reflux, the prolonged episodes of acidification related to the very infrequent swallowing which occurs at night. Nocturnal changes in intestinal motility are probably equally important though less well studied owing to the difficulty in assessment without disturbing sleep. The section on surgery was perhaps too wide ranging and hence inevitably somewhat cursory in parts, though it is still well worth reading for its excellent account of sphincter of Oddi dysfunction.

Overall, the chapters are well chosen, each presenting a digestible amount of information which forms a coherent whole. There are many excellent management flow charts especially those dealing with functional dyspepsia and constipation which provide good guides for management of these often difficult patients. The book itself also has a coherence and I found it a pleasurable read. I would recommend it to most practising gastroenterologists as well as trainees. It is probably too detailed for undergraduates unless they were making a special study of a particular topic but at £39.50 it is probably good value for most hospital libraries.

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Hereditary Cancer. Muller H J, Scott R J, Weber W, eds. (Pp 233; illustrated; DM 198/$137.50.) Karger AG, 1995. ISBN 3-8055-6329-9.

There has been a recent explosion of knowledge about the genetic basis of certain cancer predisposing syndromes, such as multiple endocrine neoplasia type 2 (MEN2, caused by inherited mutations in the RET oncogene), hereditary breast cancer (often due to inherited mutations in the BRCA1 and BRCA2 genes), and hereditary colorectal cancer. Familial adenomatous polyposis (FAP) underlies about 1% of all colorectal cancers, and is caused by germline mutations in the APC gene; a somewhat larger proportion of colorectal cancers may be due to hereditary non-polyposis colorectal cancer (HNPCC), an autosomal dominant predisposition to colorectal cancer without florid polyposis, and the mutations underlying this condition (in several genes involved in the same DNA mismatch repair pathway) have also become identifiable. In these conditions there may be numerous pathogenic mutations in each gene, making detection a laborious process, and stimulating investigations into phenotype/genotype correlations. Ethical and counselling issues are being raised about how to communicate such genetic information to individuals, and the management of those at high risk of developing specific types of cancer is receiving much attention.

Hereditary Cancer is the proceedings of the Second International Research Conference on Familial Cancer, held in Basel in 1995, which tackle some of these issues. It is a collection of small dissertations on aspects of familial cancer, mostly from European groups, many of which are quite informative, but there is a lack of overall continuity, with some overlap between contributions, leading to a certain amount of repetition. This applies particularly to the short reviews of mutations in the RET and APC genes in different geographical areas – studies not large enough to be of significance for mutation epidemiology.

The proportion of the book which is devoted to gastrointestinal topics is quite small. Initially, there are five chapters dealing with familial breast cancer, with data presented that are now rather out of date in a fast moving field, and there is no information about mutations. The chapter discussing the role of common polymorphisms in breast and ovarian cancer predisposition is useful.

The section on familial colorectal cancer tackles aspects of FAP and HNPCC; Fodde discusses mouse models of FAP and introduces ideas for understanding how different mutations in the APC gene could cause disease of varying severity. This leads logically to the two reviews of APC mutations detected in individuals with FAP from two European regions, analysing phenotype/genotype correlations, although the chapter on gastric cancer sits uneasily between them. Subsequently, there is a good review by Buerstuedde of mutations detected in 24 HNPCC families and observations upon the spectrum of extracolonic tumours found in families in which the pathogenic mutation was detected. R Scott addresses some epidemiological perspectives, with mention of rare Mendelian conditions which can underlie gastrointestinal cancer. The presentation on ulcerative colitis in Gαi2 mice seems somewhat out of context here.

There follow sections on MEN2 and von Hippel-Lindau disease, largely confined to small reviews of mutations detected in different regions of Europe, and observations on phenotype/genotype correlations.

Several brief chapters deal with DNA repair and apoptosis, with reference to the genetic conditions xeroderma pigmentosum, Fanconi anaemia and ataxia telangiectasia, but these are not comprehensive, and there is little continuity. The scope of this book is limited by the constraints of the conference remit, and many cancer predisposing conditions are not discussed, thus omitting any possibility of further exploration of mechanisms of carcinogenesis and genetic cancer predisposition, such as the involvement of developmental genes in some cancer predisposing conditions.

There are four chapters which deal with aspects of genetic counselling, including the uptake and impact of predictive testing in Mendelian conditions predisposing to cancer, but there is some overlap between them.

The final section discusses preliminary studies of chemoprevention and therapy in