BOOK REVIEWS

Functional Gastrointestinal Disorders. Edited by D A Drossman. (Pp 208; illustrated; £70.00.) Edinburgh: Churchill Livingstone, 1994.

Because functional gastrointestinal disorders are so poorly defined, research in this field has always been hampered by the inability to compare data originating from different sources and laboratories. Undoubtedly there is an urgent need for these conditions to be better classified so that we can at least be sure we are talking about and studying roughly the same entities. Unfortunately, until the pathogenesis is better understood, such efforts have to be based largely on symptomatology, which has a strong tendency to vary and overlap. In addition, the needs of the researcher and clinician may vary with the second probably being less demanding than the first.

It is against this background that the authors have set themselves the daunting task of trying to classify the functional gastrointestinal disorders writing a book around this classification. Working teams were established to cover six anatomically defined areas of the gastrointestinal system from oesophagus to anorectum and a chapter is devoted to each. Disorders affecting each area are further subdivided and discussed in detail using a similar format (definition, epidemiology, diagnostic criteria, clinical evaluation, physiological features, psychological features, approach to treatment). There are additional chapters on clinical trials and epidemiology.

As might be expected of a working team report, it is not a 'light' read but each topic is covered in a concise, detailed, and clearly written manner resulting in a very useful reference book. The work is also an excellent source of up to date references.

The resulting classification is quite complicated and may be a little too ambitious given our current state of ignorance. The authors acknowledge that this is a preliminary step and the whole thing will have to be constantly updated. Its very complexity could be its downfall, particularly if it is not constantly modified as required. Only time will tell whether it might have been better to initially go for a slightly simpler classification and develop it with time and consultation. One problem with any classification, particularly if it is rather complicated, is that it can be very hard to dismantle even if it subsequently turns out to be erroneous.

Currently, the actual classification is somewhat swamped by the size of the book and people will probably not want to carry the book around with them just to remember the various diagnostic criteria. It is possible that it would be much more likely to be used if it was available in the form of a leaflet with simple guidelines on its use. One other point: it might be advisable for chairpeople or members of the groups to be rotated to avoid steam rolling of ideas, which is a distinct danger is such a controversial area.

P J WHORWELL

Illustrated Case Histories: Gastroenterology. By A I Morris and J Y Yiannakou. (Pp 127; illustrated; £13.95.) London: Mosby-Wolfe, 1994.

Unlike our transatlantic GI Fellows, trainees in gastroenterology in the United Kingdom do not have a higher examination to pass before becoming card carrying gastroenterologists. We simply learn by diffusion and rejoice that the trials of MRCP are long behind us. This book does not therefore have instant appeal. It is really too specialised for MRCP candidates yet not a must for higher trainees in gastroenterology to rush out and buy. I sense, however, it might be a very popular complimentary acquisition at British Society of Gastroenterology meetings!

It is a good book. I enjoyed reading each of the 28 case histories hoping, perhaps, for controversy but finding myself nodding in agreement in nearly all of the cases. I am not sure I would put irritable bowel syndrome top of my list in a 53 year old with a change in bowel habit ('Doctor with diarrhoea') but I had to wait until case 26 for this moment of disagreement. Each case is well described and comprehensively illustrated with clear slides of radiology, histology, endoscopy, and investigations such as manometry or breath tests. There are quite a few irritating mistakes – I puzzled over the patient with haemochromatosis and an iron deficient blood profile and even more so over the case of Addison's disease with an erroneous calcium of 3·8 mmol/l – but on the whole it reads very well. The book covers a wide range of topics and is consistently true to everyday problem solving in gastroenterology.

The book is ideal as casual stimulation for the new trainee in gastroenterology before an in depth examination of published reports on individual cases. Gastroenterologists should buy it as a gift for their new registrars.

J SANDERSON

Hepatitis C Virus. Current Studies in Hematology and Blood Transfusion. Edited by H W Reesink. (Pp 212; illustrated; US$193.75.) Basle: Karger, 1994.

This slender volume lives up to the reputation of the series – *Current Studies in Hematology and Blood Transfusion*. Ironically, the strengths come from taking hepatitis C virus (HCV) beyond blood transfusion. The book seems to be written back to front unless you are a serious molecular biologist. The contributors are authorities drawn from around the world. The emphasis reflects the astonishing progress of molecular virology catalysed by the discovery of HCV – we have not seen it or felt it but already have cloned it, expressed it, and made tests to it.

Molecular structure and associated tests come before epidemiology – the final contribution by Prince and Brotman is a salutory reflection on what we can and cannot learn about human hepatitis viruses from transmission in animals.

The chapters on molecular structure (Chiron Corporation) and variability of the HCV genome (Simmonds, Edinburgh) are tours de force written by those at the coalface. Their value is the greater by inclusion of unpublished work. Simmonds endorses the consensus to assign HCV to a separate genus within the family *Flaviviridae*, which includes dengue virus and yellow fever virus, expanded to accommodate the pestiviruses. HCV has more nucleotide homology with the pestiviruses and certain plant viruses than flaviviruses. Interestingly, there is as much diversity (or similarity) in nucleotides between the different subtypes of HCV as between two pestiviruses, hog cholera virus and bovine diarrhoea virus, which infect different animal species.

Readers outside the field of HCV and molecular virology will probably find pearls of wisdom in the practical sections on screening tests for antibodies and polymerase chain reaction technology.

The clinical aspects are informative but highlight the limitations in progress made outside molecular biology. The sections on epidemiology illustrate the confusion surrounding the interpretation of first generation antibody tests. I believe such a definitive book should have focused on results of second generation tests and beyond. The front cover depicts the unrooted tree classification of HCV subtypes but their clinical significance is unknown. Antiviral therapy for chronic infection at best seems to give some response (negative HCV RNA) in 25 per cent but longterm outcomes are unclear and detectable viraemia is common.

This books serves well to illustrate the widening rift between conventional virology and molecular biology. The molecular virologists take most of the credit and have set HCV RNA as the gold standard in diagnosing HCV infection.

The immunologists are left flagging behind – we do not have conventional antigens, compare HBsAg in our diagnostic kits, and have too many antibodies of the wrong kind. The elegant chapter from Mainz` details profiles of autoantibodies but the jury is out as to their clinical significance in hepatitis C and other infections. We have no explanation for the seeming lack of neutralising ability of antibodies against HCV in persistent infection. Viraemic animals challenged with homologous, a well as heterologous, inoculates of HCV developed hepatitis with seroconversion and ultrastructural changes in the liver all over again – these findings bode ill for potential immunogens as vaccines.

The time has come to match clinical progress with scientific achievement. Detection of HCV RNA is laudible but does not discriminate between acute and chronic infection. The plethora of antibody tests do not locate onset of infection or predict its evolution. We know little about sexual and vertical transmission of HCV and less about its penchant for chronicity, cirrhosis, and liver cancer. The availability of sequence data for the HCV genome and subtyping is poised to revolutionise the way we trace the origin and spread of viruses. Paired studies in sexual and vertical transmission should provide sufficient data to incriminate or refute a virus; HCV is no exception.

This book provides an almost up to date view of HCV seen through the eyes of the scientist. Those outside the field could benefit, if only to admire how the molecular virologists have applied their skills to uncover one of the more mysterious agents of our time.

E FAGAN