

Book reviews

Perinatal and Infant Brain Imaging. Role of Ultrasound and Computed Tomography. By C M Rumack and M L Johnson. Pp 248: £43.00 hardback. Year Book Medical (Blackwell Scientific), 1984.

Technological improvements in the early 1970s made accurate in vivo diagnosis of intracranial lesions in the newborn a clinical possibility. Since then much has been learned and published concerning the antecedents and possible aetiology of these lesions, and of their subsequent evolution and importance for neurodevelopmental outcome. Unfortunately these methods (particularly real time ultrasound) have often been used by paediatricians with little basic knowledge of the technology or by radiologists with little knowledge of the nature of the lesions they were observing. With the rapid spread of ultrasound machines, a basic textbook concerning imaging the infant brain is very much needed as most papers on the techniques and lesions are widely scattered throughout paediatric and radiology journals. This book is thus both timely and 'custom made' for all those neonatal units who have just obtained access to an ultrasound machine and want to know what to do with it.

After a brief historical introduction there are two good basic chapters on the technology of ultrasound and computed tomography, and normal appearances of the newborn brain on scans. Useful mention is made of the variety of confusing artefacts easily produced with ultrasound, but rather too little is made of the changes in scan appearances seen with increasing gestational age.

The fourth chapter on fetal intracranial diagnosis is well illustrated with typical scans, and each developmental abnormality is covered by a brief description of its incidence, aetiology, and likely outcome. Again clear guidance on normal appearances and recognition of artefacts is given. The following chapter is similar but deals with cerebral malformations in the newborn. Greater emphasis is given here to the use of computed tomography, although ultrasound appearances are also described.

Although the widest publicity has been given to the use of imaging techniques in the diagnosis of periventricular haemorrhage, the topic is covered here in a single

chapter. It is, however, comprehensive and well illustrated. A brief but useful review of current ideas on aetiology accompanies the descriptions of the scans. Hydrocephalus neoplasms, vascular malformations, and infections are covered in three further sections. The penultimate chapter covers in a rather limited way ischaemia and infarction, and oddly has a section on normal appearances in the preterm brain which would have seemed better placed earlier. The final chapter summarises the comparative usefulness of computed tomography and ultrasound in the diagnosis of the different lesions covered, and amply points out the limitations of these techniques and where newer techniques such as nuclear magnetic resonance imaging may have a useful role to play.

This is a well written, clearly illustrated, and extensively referenced handbook which will be invaluable to experienced or novice 'imager' alike.

R W I COOKE

Manual of Paediatric Gastroenterology. By J H Tripp and D C A Candy. Pp 168: £8.95 paperback. Churchill Livingstone, 1985.

As the title would suggest this is not meant to be a comprehensive textbook on paediatric gastroenterology. It offers a problem orientated manual with clearly laid out lists of differential diagnoses, plans for investigation, and flow diagrams offering an approach to management. In the introduction, the authors support their 'telegraphic' style of text as a means of making the book 'useable.' I would agree that they have been successful in this aim. It is divided into 13 sections, the first of which covers neonatal emergencies and surgery, and the second the acute abdomen. The next eight chapters cover a variety of topics including acute and chronic diarrhoea, failure to thrive, feeding problems, intestinal bleeding, protein losing enteropathy, recurrent abdominal pain, constipation, and soiling. There is a small section on liver diseases, a useful section on nutrition which includes advice on intravenous nutrition, and a section on investigation protocols is included.

Inevitably its approach has led to a number of didactic statements with which some people might take issue. It also has inevitable omissions. Nonetheless I am sure this is a book which both junior and senior paediatric staff will find useful in helping them to approach problems in a logical way. It should be an invaluable aid to more junior members of staff preparing themselves for higher diplomas. Hospital librarians might wish that it did not fit quite so easily into a white coat pocket.

V MILLER

Prostaglandins and leukotrienes. Blood and Vascular Cell Function. (Haematology series, vol 1). By J M Gerrard. Pp 320: \$78.00 hardback. Marcel Dekker, 1985.

This single author book has been written by a paediatric haematologist who describes himself as an 'enquiring physician who has some clinical involvement but who spends most of the time in a laboratory searching for an understanding of basic and fundamental mechanisms of cellular function'. It is an authoritative and detailed review of the haematological aspects of prostaglandins and related fatty acid metabolites. There are three parts. The first covers basic biochemistry, the second the different metabolic pathways in normal blood cells, and the third—the most interesting bit for clinicians—the role of prostaglandins and leukotrienes in various pathological conditions such as thrombosis, inflammation, allergy, and disordered haemopoiesis.

It is not a clinical text and does not offer any practical treatment advice but will help those who feel bewildered by what is undoubtedly a burgeoning field. Not surprisingly, terminology is confusing for the non-expert, a difficulty compounded by synonyms—cyclo-oxygenase and prostacyclin are the same as prostaglandin endoperoxide synthase and PGI₂, for example. Nonetheless, the author carefully provides explanations where needed concerning derivation of names, and has made a generally successful attempt to keep an essentially complex and incompletely understood subject comprehensible.