reference when abnormal results are 'phoned through from the laboratory.

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Fetal and Neonatal Pathology. 2nd Ed. Edited by Jean Keeling. (Pp 609; DM318 hardback.) Springer-Verlag, 1993. ISBN 0-387-19711-7.

The Royal College of Obstetricians and Gynaecologists and that of Pathologists have set a target rate for necropsy after perinatal death of 75%. Most regions fail to achieve this target: in Wales, for example, the rate is 57%. This is a shame because the perinatal necropsy has an important audit function: some of the best perinatal mortality meetings are those at which there is active input by a pathologist who has insight into the *faux pas* of both obstetrician and paediatrician. The perinatal necropsy also provides a most useful basis for parental counselling about future pregnancies, even when the clinicopathological classification is only changed in 12.5% of cases. It is, of course, on the histopathologist that the burden for providing a good perinatal necropsy falls and Jean Keeling's book will provide that histopathologist with first class support.

In the era of ovulation induction and in vitro fertilisation, higher order multiple pregnancies are becoming more common. The perinatal mortality among twins is five or six times that of singletons and a chapter by Geoffrey Machin has been dedicated to this topic. It is the monochorionic multiple pregnancies that carry particularly high perinatal risks. This is largely because of the presence of interfetal vascular anastomoses (IFVA) in most monochorionic placentas; IFVA can result in the development of twin transfusion syndrome and twin reversed arterial perfusion (TRAP). This last condition is associated with the congenital anomaly, holocardius acephalus. It is in this chapter of the book, ostensibly for pathologists but really remarkably clinical, that we learn that in TRAP prenatal Doppler studies have shown that the intact 'pump' twin perfuses the acardiac twin retrogradely via the umbilical artery of the latter. Arterial flow is reversed in the major part of the aorta. A proportion of the arterial blood of the pump twin, destined for the placenta, crosses instead in large placental arterioarterial anastomoses to reach the common iliac arteries of the acardiac twin. This paradoxically results in structures in the lower half of the body usually surviving better than the brain which generally does not survive the abnormal haemodynamics.

The histopathologist is a close relative of the forensic pathologist and, through him or her, the detective. Jean Keeling, in her own excellent chapter on intrapartum asphyxia and birth trauma, teaches that 'the pathologist should examine skin creases and ears for residual [meconium] staining as even a still-born fetus may have been washed before being shown to the parents and despatched to the mortuary'. She also points out that, when there are facilities for ventilation, the often under-rated factor that limits survival is the presence and extent of ischaemic damage to the myocardium. Ischaemic injury is generally restricted to the inner third of the myocardium and papillary muscle. The theme is taken up in the chapter on the cardiovascular

system by Jerry Cox and Jakob Briner. They stress that myocardial necrosis, which was once thought to be uncommon in the perinatal period, has been shown to be a relatively frequent event among those coming to necropsy after severe perinatal asphyxia. Recent necrosis is seldom identifiable macroscopically, but focal whitish scarring may identify older injury. When myocardial ischaemic damage is suspected, systematic sampling of all areas of the heart is essential and special stains are often required to identify fresh necrosis.

For the practising clinician, a chapter on iatrogenic disorders (by Jean Keeling) is particularly cautionary. Here complications arising during neonatal intensive care are described: ulcerations due to endotracheal tubes, necrotising tracheobronchitis associated with high frequency jet ventilation, perforation of the lung by chest drains, oxygen toxicity and undesirable sequelae of peripheral artery sampling (for example, the slow development of a contralateral hemiplegia after temporal artery puncture, and carpal tunnel syndrome after haematomas due to radial artery sampling) are just a few that are mentioned.

George Bernard Shaw wrote in *Back to Methuselah*, 'Life is a disease; and the only difference between one man and another is the stage of the disease at which he lives'. The theme is taken up in the final section of the final chapter of this book. That section is called 'The special senses' and is by Brendan McDonald. It reminds us that at birth the taste buds are present as specialised chemoreceptors formed by modification of the oral cavity surface epithelium, with the highest density of taste receptors present on the anterior two thirds of the tongue. Unlike the olfactory chemoreceptors, the specialised taste receptor cells are continually being desquamated and replaced. The density of taste sensing cells is greatest in infancy and diminishes with advancing age.

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Liver Disorders in Childhood. 3rd Ed. By Alex P Mowat. (P 491; £75 hardback.) Butterworth Heinemann, 1994. ISBN 0-7506-1039-5.

The overall prognosis of paediatric liver disease has improved dramatically in the last decade owing to improved diagnostic techniques and better medical and nursing care. This has been driven to some degree by the availability of liver transplantation which has rescued many infants from certain death. However, transplantation is hazardous and there is a limited pool of donor organs so it remains a last resort. Early referral and accurate diagnoses are important in detecting children who might benefit from medical treatment or conventional surgery and thereby delay or avoid transplantation. Thus the objective of *Liver Disorders in Childhood* is to assist clinicians in identifying such children by emphasising presenting clinical features and describing associations with other diseases, for example, cystic fibrosis. The book retains the compactness and consistency of style present in previous editions. The combination of text, tables, and illustrations is easy on the eye. It is possible to dip into a section as well as indulge in a good solid read. Compared with previous editions, there are new chapters on autoimmune chronic active

hepatitis, sclerosing cholangitis, chronic hepatitis, and α_1 -antitrypsin deficiency as well as greatly expanded chapters on viral hepatitis and inborn errors of metabolism, which reflects the great advances in these areas. For example, hepatitis C was an unknown entity until five years ago and now details of the genome, propensity to genetic heterogeneity, epidemiology, progression to cirrhosis in infected patients, possible role in autoimmunity and treatment with interferon alfa, are available. The chapter on inborn errors of metabolism has been restructured to emphasise clinical features which alert and direct clinicians towards considering a disorder of metabolism, for example, urea cycle defects, glycogen storage diseases. This is useful as it applies some logic to the investigation and management of inborn errors of metabolism. Various disorders are discussed in more detail, of particular note are defects in bile acid synthesis and tyrosinaemia. The application of new techniques and refinements in mass spectrometry has led to the definition of at least two inborn errors of bile acid metabolism. Furthermore, new treatments for both the bile acid disorders and tyrosinaemia have been developed which may transform the management and prognosis of these disorders.

Malnutrition is common and often underestimated in chronic liver disease and is the only area not well covered in this book. As growth is one of the unique characteristics of childhood, it would have been helpful to have some discussion on detection of malnutrition and principles of nutritional support in children with liver disease.

Although liver disease in childhood is uncommon, the challenge of caring for such children is great and may involve many people in community and hospital practice. Paediatric liver disease is often chronic and requires specialist interventions from enteral nutrition to post liver transplantation monitoring. Therefore, almost all health care workers are likely to encounter children with hepatic problems at some stage and will need to refer to an authoritative and comprehensive textbook. *Liver Disorders in Childhood* fulfils that need admirably.

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Diseases of Infection. Edited by Norman Grist *et al.* (Pp 453; £22.50 paperback.) Oxford University Press, 1993. ISBN 0-19-262307-9.

There is a place in the market for another short text on diseases of infection. Such a book is not only for the specialist in infectious diseases but should be relevant to all branches of medicine. The difficulty faced by authors presenting a 'handbook' but attempting to cover a huge subject is one of finding the correct balance and maintaining the reader's interest, as such a format dictates that many areas of interesting controversy will be dealt with very briefly. This book succeeds in some areas, for example, very good chapters on erythematous rashes with excellent photographs, on septicaemia, and on the necessity to understand how the laboratory works, and the need to supply it with the correct specimens. However, it fails on others, for example, a condensation of HIV infection to 11 pages, no definitive educational section on the present ideas on continued feeding for children with gastroenteritis and the need for an absolute

ban on the use of antiemetics or antidiarrhoeals in such children.

Many young doctors and medical students using this book will proceed into general practice and I am slightly disturbed by some of the recommendations made. Perhaps there could have been fuller discussion of home prepared rehydration fluids for paediatric gastroenteritis (surely no longer recommended!), the suggestion that lack of a response to soya milk might suggest immunodeficiency (surely it suggests soya intolerance!), and there is a lack of discussion of what investigations are now indicated for young children with urinary tract infections, and the length of treatment.

For the young hospital doctor and for nurses this book will be a useful quick reference text but I doubt if anyone will read it from cover to cover. The text is a useful review but anyone wishing to really know about a patient under their care with infection will need to move on to a larger textbook. I believe it has little to offer anyone beyond the preregistration year.

Finally there are a few points with which I would take serious issue:

(1) Throat swabbing and neck radiographs are recommended in croup. I would find neither helpful and either could be catastrophic if epiglottitis is present.

(2) In the management of croup I have never seen convincing evidence that humidification is helpful and worry about advice given to use hot showers or steam kettles. The potential for accidents is alarming.

(3) Although recommended in the national formulary, I would argue against the use of topical antibiotics for staphylococcal impetigo.

(4) Would we recommend rifampicin

prophylaxis for haemophilus meningitis even if there are no other children under 5 years of age in the family?

(5) Should it not be emphasised that all patients with Stevens-Johnson syndrome have adequate analgesia?

(6) Many of us recommend a graded exercise programme as a way to combat chronic fatigue. The authors state that exercise should be avoided. They present no evidence for this. They also suggest that the patient should change lifestyle to accommodate their symptoms. This is surely another area of controversy that is lightly passed over. Many of us would feel that the most important management of children with chronic fatigue is to get them back to school.

In summary this is a useful textbook but one that has not quite conquered all the difficulties posed by a review of such a vast area of medicine. I would recommend it to medical students and nurses with qualifications but would hope that my junior staff were stimulated to sit in the library reading the relevant sections in the books by Christie, or Mandell, Douglas and Bennett.

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Motor Development in Early and Later Childhood: Longitudinal Approaches.

Edited by A Kalverboer, B Hopkins, and R Geouze. (Pp 385; £55 hardback.) Cambridge University Press, 1993. ISBN 0-521-40101-1.

Motor control and motor development are fundamental aspects of individual adaptive

behaviour. This volume is the edited proceedings of a workshop convened by the European Science Foundations Network on longitudinal studies and serially reviews the biological bases of motor development, acquisition of skills, the relationship of motor development and handicap and relevant methodological considerations.

From the paediatrician's perspective there are valid and well referenced reviews of motor development and these are linked with what is known from investigation of neuropathology in infancy. This is linked with a discussion on possible risk factors for abnormal motor development and thereafter with a description of the adaptive processes which accompany motor deficiencies in childhood and later life.

The contributors to this volume come from a range of backgrounds and disciplines and although the book is tightly edited, the disparities of background and experience show through in many of the chapters. Essentially therefore, the paediatrician is presented with an overview of relevant developmental theory and practice in the motor field but without necessarily being convinced of its clinical relevance and applicability. There are, for example, only two passing references to physical therapy and its use in the whole volume.

As an overview this book is disappointing for clinicians and probably too lightweight for researchers. Like so many conference proceedings publications, it would be of most value as an *aide memoire* to those who took part in the conferences from which it is derived.

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