BOOK REVIEWS


When it first came out 20 years ago, Black's Neonatal Emergencies was a companion volume to his book on paediatric emergencies and was virtually one of a kind; essential reading for a budding neonatal paediatrician. The second edition has been a long time coming and, as the authors point out, during this time the care of the newborn has changed out of all recognition. There has also been a proliferation in the competition with at least four similar books on the shelves; some already into their second or third editions after only five or six years. Although the authors have added a lot of new material, the age of the original still shows through.

Neonatal Emergencies is really a textbook of acute neonatal paediatrics. Starting with the background to fetal and neonatal disease, it goes on to cover the usual topics of resuscitation, birth injury, the management of the very low birthweight infant in the first few days of life, bleeding disorders, jaundice, respiratory and cardiac disease, infections, and fits. There are seven short chapters on metabolic problems and others on necrotising enterocolitis, genitourinary disorders, hydrops, and the floppy infant. Finally, there are sections on practical procedures, social problems, and talking to the parents. In all there are 34 chapters but there are some surprising inconsistencies.

There is, for example, an appendix on APT's test but none on normal laboratory values or on drug prescribing.

Each chapter describes how the particular condition presents as an emergency, its causes, and how it should be investigated and managed, with selected references and bibliography for further reading. Inevitably, many of the conditions described are not actual emergencies, but problems needing prompt attention and hence my comment that this is more a textbook on acute neonatology than a senior house officer's pocket book of neonatal intensive care.

I no longer have my original copy of the first edition, but I am delighted to have the new one. I am sure it will find a place in most special care baby units and that the nurses and senior house officers will find it a very readable and useful guide, but I suspect that the authors have 'missed the boat' and that it won't displace the competition.

On a personal note, there is an awful lot of bicarbonate being recommended for use in this book, isn't it about time paediatricians outgrew their addiction to this stuff?

B D SPEIDEL
Consultant paediatrician


In a week when every child on our neonatal intensive care unit has had one, and in some cases even two, infection screens, it seems appropriate to sit down and review this text on neonatal infections. Dr Isaacs and Professor Moxon do not set out to provide a discursive and complete text, but more one that discusses the principles and thought processes behind the management of perinatal and neonatal infections. Its success or failure must depend upon the frequency with which one uses it as a reference and as a starting point to broaden one's academic base.

The book starts with three chapters covering background, epidemiology, pathogenesis, and immunity. These chapters are brief, tightly written, and interesting. Thereafter follow chapters on the clinical aspects of infection, its presentation, investigation, and policies for using antibiotics and general support. One of the delights of reading these chapters is the commonsense approach that is taken to many issues which cause dissention and arguments on neonatal ward rounds. Next are useful chapters on specific clinical infection groups and then specific infective agents. Finally, this comprehensive text takes up the issues of surveillance, prevention, and clinical pharmacology.

As a book it has immense breadth and depth and sits nicely in a slot in which there is no comparable text. The references are well made and up to date and I think this provides the first good UK text on the subject. It also emphasises the importance of good infectious disease input on the neonatal unit. It will be of value for all grades of neonatal staff from consultant to neonatal nurse.

For such a subject where each neonatal paediatrician has his own series of solutions, I found the commonsense approach that the authors have taken left me with very few areas of disagreement. Two niggles might be that it is sad to see that 'TORCH' is still alive after its recent press and the picture of a 'card index file' was utterly rivetting.

In short an excellent text which I am sure will soon take up residence on every neonatal unit.

NEIL MARLOW Consultant senior lecturer
Would a cytomegalovirus vaccine prevent congenital infection?
Estimates of the incidence of intrauterine infection with cytomegalovirus have varied about 0·5 and 2·5% of live births. Only some 10% of babies so infected are symptomatic at birth but of the remaining 90% between 5 and 20% will subsequently show a neurological deficit.

Cytomegalovirus infection differs from rubella and toxoplasma in that the maternal infection does not necessarily occur during or immediately before the pregnancy but the fetus is still at risk from maternal infection acquired even years before. That being so, do maternal antibodies give any protection to the fetus and would a vaccine be of any use? A paper from Birmingham, Alabama (Karen B Fowler and colleagues, New England Journal of Medicine, 1992;326:663–7) attempts to answer these questions.

Congenital cytomegalovirus infection was diagnosed in 197 babies by isolating the virus from urine in the newborn period. Of these 197, infection was thought to have occurred during or immediately before the pregnancy in 132 mothers (primary infection) and some considerable time before in the remaining 65 (recurrent infection). Primary infection was diagnosed if either seroconversion was demonstrated during pregnancy (or since the last pregnancy) or IgM antibodies to cytomegalovirus were detected in maternal serum. When no IgM antibodies were found or the mother was known to have had antibodies previously the infection was assumed to be recurrent.

Symptomatic cytomegalovirus infection in the newborn, most commonly with jaundice, petechiae, or hepatosplenomegaly, only happened with primary maternal infection and was seen in 24 of 132 (18%) such cases. One hundred and eighty nine children were followed up for a mean of nearly five years and neurological sequelae were found in 25% after primary infection and 8% after recurrent infection. Sensorineural hearing loss was detected in 15% of the 'primary' group and 5% of the 'recurrent' group but none in the 'recurrent' group had bilateral loss or a speech threshold of 60 dB or more whereas each of these deficits occurred in 8% of the 'primary' group. Similarly no child in the 'recurrent' group suffered from mental retardation (IQ<70), epilepsy, or cerebral palsy but in the 'primary' group 13, 5, and 1% of children were so affected. Chorioretinitis was seen in seven of 112 (6%) in the primary group and one of 54 examined (2%) in the 'recurrent' group while microcephaly occurred in 5% and 2% respectively. Three babies died, all after primary infection.

Although the methods used in this study to distinguish between primary and recurrent infection are not completely reliable, there seems little doubt that an effective vaccine against cytomegalovirus would give considerable, though not complete, protection against damage from intrauterine infection. In an editorial in the same issue (pages 702–3) Martha Yow and Gail Demmler of the Baylor College of Medicine in Houston discuss the pros and cons of the live attenuated vaccine (Towne 125), which was developed in 1975, and possible new vaccines based on virus subunits, but call for a national vaccination programme to be set up without much further delay. In their words: 'We should not wait another 20 years while thousands of additional children are born seriously handicapped'.

ARCHIVIST

PS. A paper in the Pediatric Infectious Disease Journal from the same teams in Birmingham, Alabama (Suresh B Boppana and colleagues, 1992;11:93–9) gives details of the dreadful toll of symptomatic congenital cytomegalovirus infection in 106 newborn babies.