The volume begins with an overview of surfactant, the historical background, and takes us forward to the concept of gene cloning. There follows a treatise on the physical chemistry and physiological activity of pulmonary surfactants and this chapter is succeeded by one on surfactant proteins, those myoglobinare, at once, fundamental to the function of surfactants while being unwilling to yield their secrets. The chapter on surfactant and lung liquid absorption at birth is revealing, at least to the reviewer, but one wonders if the only function of fetal lung liquid is ‘a template for fetal lung growth’.

Alan Jobe takes us through the metabolism of lung surfactants explaining what is known, nudging us towards the unknown, raising questions along this way. One example—it would appear that exogenous surfactant does not impair endogenous surfactant synthesis but isn’t this odd in a biofeedback system? The chapter on immune complexes formed in response to surfactant administration is disturbing. Whereas no clinical effects of such complexes has been described, they may pose problems in the longer term.

The chapter by Bengt Rosenberg on microscopy both without and with surfactant replacement lends weight to the argument that such treatment improves lung function. Again, he raises questions of lung poor size and protein fluxes which will stir the reader from any intellectual lethargy.

The second half of the book deals with the variety of surfactants so far used in clinical trials. Much of the work has already been published so the reader is able to relax more into this section. Again, the authors are at pains not to be catty but to draw attention to some potential disadvantages.

Altogether, I found this book stimulating and well worth reading. My major criticism is that, overall, it may be a little too enthusiastic. I doubt whether surfactant will prove to be a panacea and would have liked to see a discussion of surfactant failures. My other criticism is that, yet again, little is mentioned of European work—an oddity that will lend common complaint of American books.


As medical literature continues to emerge at an overwhelming rate, it is refreshing to find a new book which is original, well presented, and a pleasure to use. The concept is simple: those questions commonly asked by American paediatric residents have been collected and then answered by a group of paediatricians associated with the Children’s Hospital of Philadelphia. The areas covered include pathophysiology, clinical management, diagnostic tricks, specific diseases and definitions, useful physiological data, and a few delightful oddities (Onidine’s curse is compared with ‘intern’s curse’, mortals who are affected by not sleeping when they breath!).

The title is misleading and does not do justice to the book which it may be useful to have at the resident (or senior house officer) who needs to have all the answers during a ward round, it has a much wider potential use. Candidates for the MRCP examination will use it for gathering information and paediatricians will find it valuable for teaching sessions, true-to-date examinations, and for clinical management information. Each main system (alveoli) has a separate chapter, and each question is followed by succinct, up to date information or advice. The information is presented as a discussion, or in lists and tables. There are a few line drawings and flow diagrams.

There is an inevitable American bias, and although some treatment advice is less useful in the UK (for example, the management of acute asthma or immunisation schedules) most information presented is pertinent and valuable. Some areas are particularly well covered, for example the treatment for necrotising enterocolitis and the discussion of Kawasaki disease are very good. It was wonderful to find precise information that is sometimes difficult to track down elsewhere.

There are a few errors and inconsistencies but the scope and accurate detail of the areas covered are remarkably comprehensive. This is a fascinating, useful book and I would urge all paediatric departments to have a copy. Junior paediatricians can use it to assist their seniors, whilst seasoned consultants can dip into it at leisure, remind themselves of the answers to 1819 questions, or use it as a valuable reference for clinical problems.

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This book draws together in a compact work the increasing volume of information on this the second commonest cause of mental retardation after Down’s syndrome. The fragile X syndrome, recognisable cytogenetically under certain conditions by a gap (fragile site) at Xq27 on the X chromosome, is unusual among X linked disorders in that as many as one third of obligate carrier females are mentally retarded. Even more fascinating is the fact that the condition may be transmitted through clinically and cytogenetically normal males.

Five authors, distinguished in their respective fields, cover the important aspects of the clinical manifestations, epidemiology, behaviour and treatment, and DNA and cytogenetic studies.

Paediatricians and clinical geneticists alike will find Jean-Pierre Fryns’ clinical descriptions and accompanying photographs useful; the classical clinical triad of moderate mental retardation, long face with large everted ears and macro-orchidism often seen in the prepubertal fragile X male is less evident in the prepubertal male in whom relative macrocephaly is more striking and macro-orchidism is uncommon. Randi Hagerman emphasises the important correlation of the fragile X syndrome with autism and describes the characteristic behaviour patterns of affected individuals, which not only provide important clues for the diagnosis but also allow appropriate treatment and educational programmes to be devised. Useful comments are included on seeking and treating associated problems, such as pes planus, strabismus, hernia, scoliosis and mitral valve prolapse, which is said to affect as many as 50% of males. Treatment with folate is perhaps a more controversial issue than the author suggests.

The syndrome occurs in all ethnic groups and Tessa Webb’s chapter on epidemiology emphasises the need to define the populations for which prevalence figures are being determined.

At the molecular level, a number of theories have been proposed by various authors to explain the basis of this unique disorder; these are lucidly summarised by Ted Brown. The gene itself is proving to be elusive and it has been difficult to identify DNA markers which are consistently close to the fragile X locus. Ted Brown describes, however, how in some families, use of flanking DNA markers may help in carrier detection studies.

Neil Tommerup highlights the cytogenetic ‘catch 22’; males and females with non-specific mental retardation ideally should be tested cytogenetically for fragile X, but this adds a heavy workload to the laboratories, as many cells need to be screened (only a proportion express the fragile X marker) and special culture conditions must be met.

One minor criticism is that most of the authors refer to the ‘female heterozygote’ without defining whether this refers to obligate carrier females who express the fragile X marker or carrier females who do not express the marker. It is essential that the distinction is made clear. The importance of the fragile X disorder is such that a ready means of recognition is needed.

In contrast to the recent preoccupation with the role of sudden infant death syndrome in the sudden infant death syndrome (SIDS) epidemic, the syndrome continues to be neglected; neonatal death (both sudden and non-sudden) accounts for only 11% of all infant deaths. In England and Wales, neonatal death is the leading cause of death in the first year of life. Between 1977 and 1986, 94% of these deaths were ascribed to fetal causes, with the remainder being attributed to congenital, perinatal or perinatal pathological causes; about 10% were due to respiratory distress syndrome, 2% to meconium aspiration syndrome, 2% to congenital infections, and 1% to other causes.

The book is aimed at clinicians who treat children and includes data from the Oxford Regional Neonatal Network and the EEC consortium. The authors write in an informative and accurate style, giving results with confidence and precision. The emphasis throughout is on the neonatal period, especially the first day of life.

It is clear that the authors have made every effort to present the case with as much accuracy and detail as possible. However, the book is not without its faults. In the section on outcome, for example, it is not clear whether the figures quoted for sudden deaths include deaths from other causes. A useful and clearly written book, but in need of careful perusal; it is recommended for all who work with sick newborn babies.