

Correspondence

ness, again when applied to the whole population of asthmatic individuals, leads to a disproportionate increase in the proportion of those with severe disease. The probable validity of the second assumption can be illustrated (figure) by comparing childhood asthma prevalence in England and New Zealand (EA Mitchell, HR Anderson, unpublished study). The lifetime prevalence of wheeze in Auckland, New Zealand, is 18.5% higher than in South West Thames, England (25.6% v 21.6%), the prevalence of wheeze in the last 12 months 32.1% higher (14.8% v 11.2%), and the prevalence of wheeze in the last month 87.5% higher (7.7% v 4.1%). Thus there is a difference in the distribution of asthma severity between the two countries. Could this be produced by New Zealand's higher asthma drug consumption² and the promotion of maintenance beta agonists?

Dr Gregg speculates that "pan-adrenoceptor" agonists may be superior to selective beta₂ agonists in relieving and preventing mucosal oedema. These drugs were effective when used intermittently for acute severe asthma. The hypothesis, however, relates to long term regular use. The recent report suggesting that fenoterol, a less selective beta₂ agonist, might increase the risk of death in patients with asthma³ indicates the need for caution before returning to even less selective adrenoceptor agonists.

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- 1 Vathenen AS, Knox AJ, Higgins BG, Britton JR, Tattersfield AE. Rebound increase in bronchial responsiveness after treatment with inhaled terbutaline. *Lancet* 1988;i:554-8.
- 2 Keating G, Mitchell EA, Jackson R, Beaglehole R, Rea H. Trends in sales of drugs for asthma in New Zealand, Australia and the United Kingdom, 1975-81. *Br Med J* 1984;289:348-51.
- 3 Crane J, Flatt A, Jackson R, *et al*. Prescribed fenoterol and death from asthma in New Zealand, 1981-3: case-control study. *Lancet* 1989;i:917-22.

Book notices

Directions for New Anti-asthma Drugs. S R O'Donnell, C G A Persson. (Pp 325; \$58.) Basel: Birkhauser, 1988. ISBN 3-7643-1957-7.

This book presents the proceedings of a workshop held in 1987 in Australia as a satellite meeting of the Xth International Congress of Pharmacology and attended by pharmacologists mainly engaged in asthma research. It covers recent advances in our understanding of the mechanisms underlying asthma, with particular emphasis on possible new classes of antiasthma drugs and on improvements of established ones. The first chapter underlines the necessity to control airway inflammation as a basis for antiasthma treatment. In the section on "symptomatic" treatment, beta adrenergic drugs, calcium ion blockers, potassium channel activators, and inhibitors of arachidonic acid metabolites are reviewed. Xanthines, anticholinergics, antagonists of platelet activating factor, glucocorticoids, and drugs interfering with microvascular leakage are discussed under the "non-symptomatic-prophylactic" heading. The remaining chapters

include synopses on routes of administration and on future directions for the twenty first century. Although the classification of these agents into "symptomatic" and "non-symptomatic" categories seems to me to be quite arbitrary (for example, antiallergic and cholinergic drugs are dealt with in the same chapter in the "non-symptomatic/prophylactic" section), this book gives an overall state of the art account of these established or potential antiasthma drugs. Most chapters provide an overview, but some authors present only detailed data of specific experiments. Many potential drugs have not yet reached the stage of clinical testing but a succinct account of the effects of these drugs on *in vitro* systems or in animals is given. The chapter on antiasthma glucocorticoids is an excellent review of their possible mode or modes of action. This book provides a fresh impetus to newer pharmacological approaches to asthma and should be of interest to both pharmacologists and clinicians interested in the treatment of a condition which is increasing in prevalence and severity.—FC

Bronchopulmonary Dysplasia. T A Merritt, W H Northway Jr, B R Boynton. (Pp 452; £45.) Oxford: Blackwell, 1988. ISBN 0-86542-047-5.

One of the most striking changes in neonatal intensive care over the last 20 years has been the recognition and proliferation of bronchopulmonary dysplasia. This condition, which carries a mortality rate of up to 20%, has emerged as techniques for keeping ever more immature babies alive have become more successful. There remains considerable dispute on the aetiology, management, and long term outcome of this condition. This book provides a very useful, up to date, and comprehensive review of the subject. The book is introduced by a historical overview of neonatal respiratory support. The second section covers the pathogenesis and pathophysiology, including tracheal cytology, the role of barotrauma, and defects of the antioxidant and antiprotease systems. The third part, which will be of most use to clinicians, considers clinical manifestations and critically reviews the various treatments that are currently in use. The remainder of the book examines possible new approaches to treatment and prevention and reviews the various studies in the long term outcome. The authors have recruited 32 contributors. I enjoyed reading all the sections, though there was some overlap, particularly in the sections on pathogenesis. It is also not obvious why the editors have included two sections on lung function abnormalities in bronchopulmonary dysplasia. This is a book that all those concerned with intensive neonatal care, or with a specialist interest in respiratory problems in early childhood, will find of great value and I would certainly hope that this would be seen as a high priority book in hospital and university libraries. I am very pleased that as a result of reviewing this book I have my own copy.—ADM

Thymic Tumors. R Sarrazin, C Vrousos, F Vincent. (Pp 172; £76.90.) Basel: Karger, 1989. ISBN 3-8055-4800-1.

This book contains a comprehensive series of monographs resulting from presentations made at the 7th Grenoble

Cancer Research Workshop on Thymic Tumours in 1987. The papers are arranged in three sections: "From the symptom to the pathological diagnosis," "Therapeutic retrospects of invasive thymomas," and "Therapeutic strategies in inoperable thymomas." The first section overall gives a comprehensive review of the basic understanding of thymic disease covering anatomy, epidemiology, clinical manifestations, surgery, and pathology. Although the inclusion of case reports of rare entities such as thymic carcinoid tumours as part of MEN 1 is questionable this section in general is well presented and comprehensive, giving the reader a succinct view of current publications. The second section presents data on imaging techniques and the results of primary treatment for various types of thymoma. There are clear demonstrations of the value of new imaging techniques such as computed tomography and MRI in the assessment of thymic tumours. The results of operative treatment in some large series is presented. The final section addresses the therapeutic options available for advanced thymomas. The various results of radiotherapy and chemotherapeutic regimens are presented. There are few comprehensive texts on thymic tumours. This book provides a useful and interesting compellation of up to date information. I would encourage those working in this field to peruse it and recommend libraries serving thoracic units to stock it—IOE

Respiratory Physiology. (Lung Biology in Health and Disease, vol 40). HK Chang, Manuel Paiva. (Pp 869; \$180.) New York: Dekker 1989. ISBN 0-8247-7855-3.

This book is devoted to those aspects of respiratory physiology that lend themselves to mathematical analysis. One finds therefore that of the 25 contributors no less than 17 have their doctorates in engineering or physics. Subjects covered include morphometry; gas flow, distribution, and mixing; gas exchange (three chapters); control of breathing; mechanics of the parenchyma, interstitium, and circulation. It is refreshing to find a number of less familiar names as

contributors, especially from Europe. The great merit of such a book is that it brings together and condenses much fascinating work that has been previously published in widely scattered original articles. Unfortunately many of us who are clinicians do not have the mathematical facility to appreciate fully much of this sort of work. Most contributors, however, translate their concepts into graphs and line drawings which together with beautiful photomicrographs, help understanding. There is no doubt that the application of theory derived from engineering, physics, and other disciplines to the problems of respiratory physiology has resulted in a ferment of intellectual activity and shed new light on old problems. This is very exciting for those engaged in this work. As clinicians we are inclined to ask the question, "Yes, but has any of this actually made any difference to patients?" The short answer is, "No, not yet and not directly." This is basic research and should not be judged by that sort of utilitarian yardstick. It is an attempt to understand the structure and function of the lung at a deeper level. Any clinical application that might come out of the work would be a bonus. Although most clinicians will find parts of this book tough going it is to be hoped that most would find at least some chapters give them a further view of an area of their own especial interest. A book worth considering for your hospital library if not your own.—JSM

Notice

Course on pharmacology of asthma

A course on the pharmacology of asthma will be held from 28 November to 1 December 1989 at the National Heart and Lung Institute, Dovehouse Street, London SW3 6LY (organiser Professor P J Barnes). Details from the Postgraduate Centre at the Institute (01 352 8121).