

LETTERS TO THE EDITOR

Emergency treatment of asthma

In their recent paper on the emergency treatment of asthma by ambulance personnel Campbell and colleagues (January 1995;50:79-80) state that 5 mg of salbutamol given by an oxygen-driven nebuliser was more effective than either 5 mg terbutaline via Nebuhaler or 200 µg salbutamol via pressurised inhaler. The accompanying editorial by Cochrane (January 1995;50:1-2) expresses surprise that the Nebuhaler should perform so badly in comparison with the nebuliser. Precise details of the method by which the spacer was used were not given, and knowledge of this may have provided an explanation for the poor results seen with terbutaline administered via the Nebuhaler. New spacers were used in the study, and 20 actuations of terbutaline were administered by actuating the metered dose inhaler into the spacer two or more times, then allowing the patient to inhale (IA Campbell, personal communication).

We have shown that inhalation following multiple actuations of a metered dose inhaler into a spacer reduces the amount of drug available (by 60% in the case of five actuations of salbutamol into the Volumatic) compared with the repeated inhalation of a single actuation.¹ Furthermore, new spacers are often highly charged with static electricity reducing drug delivery further. If one can extrapolate our *in vitro* work with sodium cromoglycate,² nedocromil sodium,³ beclomethasone dipropionate,⁴ salbutamol,¹ and budesonide⁵ to terbutaline, we estimate that the equivalent of 2 mg terbutaline was the dose available for inhalation to the subjects in the study, rather than the 5 mg stated. If five actuations were administered between inhalations, the dose delivered may be as low as 1 mg. This may be the reason for the lack of bronchodilation seen with the spacer and metered dose inhaler. In comparative studies where spacers are used it is vital that the exact method of spacer use is documented. The amount of drug coming out of a spacer is not always the same as the amount put in.

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- 1 Barry PW, O'Callaghan C. Multiple actuations of salbutamol metered dose inhaler into a spacer device reduce the amount of drug recovered in the respirable range. *Eur Respir J* 1994;7:1707-9.
- 2 O'Callaghan C, Lynch J, Cant M, Robertson C. Improvement in sodium cromoglycate delivery from a spacer device by use of an antistatic lining, immediate inhalation and avoiding multiple actuations of drug. *Thorax* 1993;48:603-6.
- 3 Barry PW, Robertson C, O'Callaghan C. Optimum use of a spacer device. *Arch Dis Child* 1993;69:693-4.
- 4 O'Callaghan C, Cant M, Robertson C. Delivery of beclomethasone dipropionate from a spacer device. What dose is available for inhalation? *Thorax* 1994;49:961-4.
- 5 Barry PW, O'Callaghan C. The effect of delay multiple actuations and spacer static charge on the *in vitro* delivery of budesonide from the Nebuhaler. *Br J Clin Pharmacol* 1995 (in press).

Toxicity of isoniazid and rifampicin combination

Drs Askgard, Wilcke and Døssing (February 1995;50:213-4) described hepatotoxicity caused by the combined action of isoniazid and rifampicin but not by each drug given alone. In the first short-course chemotherapy trial run by the British Thoracic and Tuberculosis Association, two patients reacted with rash and pyrexia to the combination of these two drugs, but not when challenged by either given singly.¹ In this age of polypharmacy these reports are a timely reminder that drugs can act in combination to produce adverse effects.

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- 1 British Thoracic and Tuberculosis Association. Short-course chemotherapy in pulmonary tuberculosis. *Lancet* 1975;ii:119-24.

BOOK NOTICES

Principles and Practice of Mechanical Ventilation. Martin J Tobin (ed). (Pp 1300). New Jersey: McGraw-Hill, 1994.

To generate a 1300 page book on mechanical ventilation is a tour de force in itself. To maintain the reader's interest throughout is an even greater achievement, especially as 20 authors were involved in its genesis. The scene is set by a splendid opening chapter on the historical background of ventilation followed by a lucid exposition of the principles underlying its physical basis. In addition to the contents expected of such a book, "off beat" aspects such as ethics, economics, and transport are adroitly covered. In particular, the chapter on psychological aspects is welcome as this is an oft neglected area. As would be expected from the editor's background, the physiology and monitoring sections are comprehensive but the clinical aspects achieve equal prominence. I have a few relatively minor quibbles: in clinical practice ventilation is usually straightforward except when the patient is either very sick or difficult to wean. A "How to ventilate the sick patient" chapter encompassing the different techniques of maintaining adequate gas exchange with minimal iatrogenic trauma would be a useful addition. Similarly, the coverage of weaning the difficult patient could be expanded further. The chapter on neuromuscular blockade, sedation, and pain control could also benefit from being less pharmacological and more practical in emphasis.

While aimed principally at the intensive care practitioner, there is much to commend this book to both anaesthetist and chest physician. In particular, home ventilation and non-invasive ventilation are well covered. Dr Tobin should be congratulated on producing the definitive textbook on the subject. - MS

The Mesothelial Cell and Mesothelioma. Marie-Claude Jaurand, Jean Bignon. (Pp 368; \$145.00). New York: Marcel Dekker, 1994. 0 8247 9232 7.

This book is a welcome arrival in view of the steadily increasing incidence of mesothelioma which is now approaching 1000 cases a year in the UK alone. It is presented as a series of individual papers covering the epidemiology, pathogenesis, diagnosis, and clinical management of the disease. Each chapter is written by acknowledged experts in their fields, and some are exceptionally clearly written and presented. The chapters on histochemical and cytological diagnosis contain a great deal of technical detail that would be of help to laboratory workers. The final chapters on treatment contain results of very recent work on both animal models and clinical trials. This type of book inevitably lacks a coherent style, with each chapter tending to stand independently of the others as if it were a paper given at a meeting and, unless there is a firm editorial hand, this results in needless repetition as, for example, each author writes his own introduction to the subject. Similarly, the grouping of references at the end of each chapter leads to considerable duplication. This is perhaps a book to be read as individual chapters addressing one particular aspect of the problem, rather than from cover to cover. There is a great deal that is stimulating and informative in this book and it will be of particular interest to those physicians, oncologists, and pathologists in districts where mesothelioma is becoming an increasingly common problem. Most departments of respiratory medicine would like to have it in their library, but whether their budget can afford \$145 is another matter. - AWM

NOTICES

20th International Conference on Lung Sounds

The 20th International Conference on Lung Sounds will be held in Long Beach, California, USA on 11-13 October 1995. For information regarding the meeting please contact Raymond L H Murphy Jr, Faulkner Hospital, 1153 Centre Street, Boston, MA 02130 (Tel 617 522-5800, x1968, Fax 617 524-8663) or Christopher Druzgalski, California State University, Electrical/Biomedical Engineering, Long Beach, CA 90840, (Tel 310 965-8054, Fax 310 985-7561, Email: ilsac@csulb.edu, Web: <http://www.csulb.edu-ilsac>).

XVth World Congress of Asthmology (Interasma)

The XVth World Congress of Asthmology will take place in Montpellier, France on 24-27 April 1996. The general theme of the congress will be "From gene to quality of life" and will focus on genetics, optimum asthma treatment, and quality of life. For further information please contact Mrs J Siraudin, BP 5067, 34033 Montpellier Cedex 1, France. Telephone +33 67 04 20 20. Fax: +33 67 04 20 00.