LETTERS TO THE EDITOR

Auranofin in steroid dependent asthma

We read with interest the article by Dr Nierop and others (May 1992;47:349-54) concerning oral gold in the treatment of steroid dependent asthma. We were surprised to notice that most patients did not receive maximal high dose inhaled corticosteroids when included in the study; this was the case with nine patients in the placebo group (69%) and eight patients in the auranofin group (53%). This must be pointed out as high dose inhaled corticosteroids (that is, beclomethasone 1500–2000 μ g/day or budesonide 1200– 1600 μ g/day) are known to be more effective than the usual doses (400–1000 μ g/day) in the control of asthma. In steroid dependent patients high dose inhaled steroids generally allow a reduction in oral steroid requirements.1 Moreover, many asthmatic patients are well controlled with high dose inhaled steroids and are therefore able to stop oral steroids,¹² especially when the maintenance dose is below 10 mg/day prednisone. In the study by Dr Nierop and his coworkers 15 patients received less than 10 mg/day prednisone and were treated with low dose inhaled corticosteroid (less than 1000 μ g/day), which is clearly insufficient. We think that the definition of steroid dependent asthma should be applied to patients who need oral corticosteroids despite taking high dose inhaled steroids for a long period, especially before the use of corticosteroid sparing agents is considered. This view is in agreement with the previously published guidelines for the treatment of severe chronic asthma.

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- Ädelroth E, Rosenhall L, Glennow C. Highdose inhaled budesonide in the treatment of severe steroid-dependent asthmatics. *Allergy* 1985;40:58-64.
- 2 Toogood JH, Lefcoe NM, Haines DSM, Jennings B, Errington N, Badsh L, et al. A graded dose assessment of the efficacy of beclomethasone dipropionate aerosol for severe chronic asthma. J Allergy Clin Immunol 1977;59:298-308.
- 3 British Thoracic Society. Guidelines for management of asthma in adults: 1—Chronic persistent asthma. BMJ 1990;301:651-3.

AUTHORS' REPLY The asthmatic patients participating in our study received oral corticosteroids because corticosteroid treatment by inhalation failed to bring their clinical condition under adequate control. These patients we considered to be steroid dependent. High dose inhaled corticosteroids were given to all patients before they entered the study, in an attempt to reduce the oral dose. Eleven patients, who inhaled at least 1600 mg beclomethasone daily, could not discontinue oral prednisolone because of persisting bronchial obstruction. In 14 patients high dose inhalation corticosteroids could not be used because of side effects (pharyngeal candidiasis, unacceptable hoarseness). Three patients did not tolerate inhalation steroids at all (cough and dyspnoea).

We agree that inhalation of high doses of corticosteroids (>1600 μ g/day) should be tried when asthma is not controlled by the combination of bronchodilators and a conventional dose of inhaled corticosteroids. Even high doses of inhaled corticosteroids, however, are not always able to control asthma in some patients. Apparently such patients were overrepresented in our study.

We believe that the only justifiable conclusion is our own: "the administration of auranofin in some patients with severe steroid dependent asthma may be justified." Thus we have not suggested that auranofin treatment in steroid dependent patients in whom high dose inhalation steroids have not been tried is the treatment of choice.

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Fatal lung abscess due to Lactobacillus casei ss rhamnosus

We read with interest the short report of Dr Namnyak and others on lung abscess due to *Lactobacillus casei* (August 1992;47:666–7). In the discussion it is stated: "... Pneumonia with empyema due to *Lactobacillus* has been described in only three cases."

We have previously reported three cases of lactobacillus pneumonia and empyema¹² and we have recently treated one patient with mixed lactobacillus and tuberculous empyema.³

Empyema due to *Lactobacillus* seems to be more frequent than has previously been reported. This is probably due to the fact that, as stated by Dr Namnyak and his colleagues, several types of culture media for prolonged anaerobic incubation are now available.

Our own experience confirms the opinion of the authors on the possibility of an oropharyngeal or gastrointestinal portal of entry (or both) in pleuropulmonary infections due to *Lactobacillus*. In two of our four patients a broncho-oesophageal fistula was present; another patient underwent a surgical procedure for oesophageal varices secondary to liver cirrhosis days before the pulmonary infection; and the fourth patient had a dental abscess before the development of the pulmonary infection and empyema.

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- 1 Querol JM, Manresa F, Izquierdo J, Cisnal M. Lactobacillus pneumonia in a patient with an esophageal carcinoma. Eur Respir J 1989;2: 589-91.
- Querol JM, Manresa F, Barbé F, Cisnal M. Lactobacillus and pleuropulmonary infection. *Eur Respir J* 1989;2:1021-2.
 Prats E, Molina S, Valldeperas J, Manresa F.
- 3 Prats E, Molina S, Valldeperas J, Manresa F. Lactobacillus y empiema tuberculoso. *Med Clin (Barc)* 1992;98:596-7.

BOOK NOTICE

Respiratory Monitoring. Martin J Tobin. (Pp 258; £22.50.) Edinburgh: Churchill Livingstone, 1992. ISBN 1050 9623.

This short text is part of the "Contemporary Management in Critical Care" series and provides the reader with a good overview of various aspects of monitoring of the respiratory system. It is a collection of monographs, many of which are written by internationally known experts. The book starts with a chapter on arterial gas blood monitoring dealing with the physiological and pathophysiological aspects of arterial blood gas analysis. The meaning of alterations in blood gases and practical use of the data are covered clearly and succinctly. The theme of blood gas monitoring continues through the first six chapters. An account of on line blood gas monitoring introduces the reader to the methods currently available, pitfalls, and future perspectives. The chapter on pulse oximetry gives excellent coverage of its history, the physical principles, and the factors affecting accuracy. Extremely useful information on artefactual effects, such as those caused by anaemia, circulating dyes, and 'nail varnish and skin pigmentational arrhythmias, provides the reader with a sense of caution over interpretation of data from an instrument that has come to be taken for granted. Continuous mixed venous oxygen saturation monitoring is presented in a style similar to that of pulse oximetry, with additional illustrative case histories. The subject of carbon dioxide monitoring is not covered in as much detail as the chapters on oxygen monitoring-perhaps justifiably. The chapters on gas monitoring occupy about half of the book, the remainder being dedicated to the subjects of neuromuscular function, respiratory mechanics, and information management. The chapter on neuromuscular function includes both physiological principles and various methods of monitoring, many of which are in routine use. The information given about these various techniques is not as detailed as the information in the chapters on gas analysis, but nevertheless provides a useful overview. Respiratory mechanics are covered in a chapter that includes considerable mathematical modelling. The presentation makes this understandable and clinically useful. As well as the various pressure-volume relationships that can be measured this chaper includes a few notes on methods of monitoring the work of breathing. The final chapters in the book cover information management and finish with a cautionary chapter on cost effectiveness. This book represents good value for money at $f_{26.50}$ and should be placed in the libraries of all intensive care units, where the information contained will be useful for those learning the basic principles as well as junior medical staff and intensive care nursing staff. It is easy to read and is extremely well referenced.-ARW