drug. We consider that this leaves insufficient time for reliable identification of the offending drug or drugs. We agree that the drugs should probably be re-introduced in this order.

A further difficult problem is the re-introduction of chemotherapy after an episode of acute liver failure. Certainly it is our policy, as discussed by Mitchell *et al*,[1] to change to drugs with no history of hepatotoxicity in patients fortunate enough to have survived this complication.

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1 Mitchell I, Wendon J, Fitt S, Williams R. Antituberculous drugs and liver failure. *Lancet* 1995;**345**:555–6.
2 Moulding TS, Redeker AG, Kanel GC. Twenty isoniazid-associated deaths in one state. *Am Rev Respir Dis* 1989;**140**:700–5.
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AUTHORS' REPLY The editorial set out recommendations on the management of hepatic reactions after due consideration of both the risks of tuberculosis itself and the risk from the drug treatment. There have been 45 deaths from liver reactions to currently recommended first-line antituberculosis drugs since 1963, with isoniazid implicated in a maximum of 25 of these. Over the same period of time there have been 272 000 notified cases of tuberculosis (all forms), with pulmonary disease – which makes up the majority of cases – carrying an overall mortality of some 5%. The most recently published annual infectious disease statistics show 418 deaths from tuberculosis in 1994,[1] and the level of tuberculosis deaths has been at that level for the last five years, and substantially higher in the earlier part of the period 1963–94. The risk of dying from tuberculosis is therefore clearly at least 200 times higher than that of a fatal hepatic reaction from the treatment, and inadequate treatment must intuitively raise the mortality of the disease still further.

We would agree that cases of hepatotoxic reactions may arise from inadequate clinical monitoring and particularly from failure to modify or to discontinue treatment when clinical and biochemical abnormalities have appeared. This makes it even more important that all cases of tuberculosis are under the care of physicians trained in its management, and with recommended dosages and durations of drugs.[2] In the paper by Mitchell *et al* from the King's unit referred to by Devlin and colleagues no dosages, drug durations, or patient weights were given, so it was not shown that correct management led to the problems reported.

Devlin *et al* accept that their recommendations that chemotherapy be withdrawn if liver transaminase activity reaches three times normal is not based on firm data. The suggestion that isoniazid at least should be withdrawn at this level does not seem logical. A large, mainly prospective, study of reactions to antituberculosis treatment showed that the incidence of hepatotoxic reactions was lowest to isoniazid at 0.3%, being appreciably higher to pyrazinamide (1.25%) and rifampicin (1.4%).[3]

The essential difference between Devlin *et al* and our editorial is the "balance point" between the risks of treatment and the risks of the underlying disease. To have a level of transaminases of three times normal for modification of treatment may well be unduly harsh. Some patients with such pretreatment levels of transaminases as a result of extensive or disseminated tuberculosis who already face a significant mortality would be denied the most effective antituberculosis drugs, thus increasing further their mortality from the disease. The emergence of multiple drug resistant tuberculosis, which is often due to inadequate treatment and compliance monitoring, is a further reason why standard chemotherapy should not be altered without strong justification.

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1 Office for National Statistics. *Communicable Disease Statistics 1994 England and Wales.* Series MB2, No 21. London: HMSO, 1996.
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Pneumomediastinum following Politzer's manoeuvre

The report by Dr Torres-Melero and co-authors of a case of pneumomediastinum following the use of a high speed air turbine drill during a dental extraction (March 1996; **51**:339–40) contains some interesting points about iatrogenic pneumomediastinum.

A 35 year old man was recently admitted as an emergency to our department with acute severe neck and retrosternal pain, dyspnoea, vomiting, and agitation. These symptoms suddenly appeared during Politzer's manoeuvre carried out for the treatment of acoustic problems. Clinical examination showed subcutaneous emphysema in the neck and anterior chest wall with swelling around the eyes and over the cheeks. The patient had no pre-existing lung disease. Blood pressure and pulse, laboratory tests, electrocardiography and arterial blood gas tensions were normal. Chest radiography showed pneumomediastinum, bilateral apical pneumothorax, and subcutaneous emphysema. A large quantity of air was noted in the gastrointestinal tract on the abdominal radiograph. A computed tomographic scan confirmed the presence of air in the soft tissues of the neck, extending through the mediastinum to the diaphragm, with detachment of the mediastinal pleura and the apical parietal pleura bilaterally. The lungs were not collapsed. An oesophageal contrast study was performed to exclude any lesions in the digestive tract; no abnormalities were noted. Fibreoptic endoscopy found no lesions in the mucosa of the rhinopharynx. The patient was treated conservatively and his clinical condition improved within 48 hours; he was discharged well six days after admission. A follow up chest radiograph 15 days after discharge showed almost complete disappearance of the air collection.

Our case has to be considered as another cause of iatrogenic pneumomediastinum and should be added to the others previously described.[1-3]

The Politzer's manoeuvre is a method of restoring the patency of the tubes in middle ear diseases. The aim of the technique is to balance the atmospheric pressure and the pressure inside the eustachian tube by insufflating air through the rhinopharynx with a closed epiglottis. Air can be insufflated manually with a pearpush or mechanically with a conveniently balanced compressor (usually no more than 2000 millibar). Although the exact mechanism of entry of air was not found in our patient, it is likely that malfunction of the machine (or an inappropriate use of the equipment) allowed the output of air at high pressure which diffused down the fascial planes to the mediastinum and to the soft tissues of the neck through a small laceration of the rhinopharyngeal mucosa. This suspicion was confirmed by the massive quantity of air in the digestive tract and in the anterior extrapleural space.

Pneumomediastinum must be considered as a rare complication of the use of a jet of compressed air from different medical instruments.

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1 Naughton M, Irving L, McKenzie A. Pneumomediastinum after transbronchial biopsy. *Thorax* 1991;**46**:606–7.
2 Lee HC, Dewan N, Crosby L. Subcutaneous emphysema, pneumomediastinum and potentially life-threatening tension pneumothorax. *Chest* 1992;**101**:1265–7.
3 Kern C, Tassonyi E. Pneumomediastinum due to the use of a jet of compressed air. *Can J Anaesth* 1989;**36**:78–80.

BOOK REVIEWS

Pulmonary Circulation – A Handbook for Clinicians. A J Peacock. (Pp 508; £95.00). London: Chapman & Hall, 1996. 0 412 56870 5.

This volume of over 500 pages pulls together many different strands of the anatomy, physiology, and therapeutics of the pulmonary circulation and its disorders. It is particularly strong in the evaluation of the pulmonary circulation in special environments and includes chapters by Jack Reeves on high altitude and high altitude pulmonary

oedema, and the often neglected features of the pulmonary circulation during obstructive sleep apnoea. My main reservation is with the subtitle for the book – a "handbook for clinicians". There are several excellent chapters on the basic scientific mechanisms underlying pulmonary vascular responses and pulmonary hypertension which are of great interest to those researching in the field, but some relatively common clinical scenarios such as pulmonary hypertension secondary to fibrotic lung disease are dealt with scantily. Oxygen therapy is dealt with in a well written but brief chapter by Bill MacNee and nitric oxide is covered by the Minneapolis group as a physiological modulator rather than a potential therapy.

Despite its theoretical rather than practical emphasis, this handbook contains some excellent chapters on the investigation of the pulmonary circulation in disease and pulmonary hypertension in paediatrics. The surgical aspects, particularly transplantation, are dealt with from the physician's rather than the surgeon's point of view and Paul Corris presents an easy to follow set of indications for intervention. Thromboendarterectomy is dealt with in much greater detail in an excellent chapter by Moser and Fedullo which provides a comprehensive overview of the clinical aspects of this problematic area.

In summary, this is a volume which is a little weak on some of the therapeutic areas concerning pulmonary vascular disease but will be an excellent handbook for clinicians dealing regularly with pulmonary hypertension, particularly in terms of investigation and the scientific basis for the diseases they see. Any unit working in the field should purchase this volume as it is an excellent resource for both clinicians and scientists. – AHM

Acute Respiratory Failure in Chronic Obstructive Pulmonary Disease (Lung Biology in Health and Disease Series, Volume 92). J-P Derenne, W A Whitelaw, T Similowski. (Pp 952; $225.00). New York: Marcel Dekker, 1996. 0 8247 9487 7.

There has been a resurgence of interest in the management of acute respiratory failure in patients with COPD in recent years, possibly stimulated by the introduction of non-invasive ventilation in this area. Guidelines are appearing thick and fast, so the publication of this volume is timely. An international panel of authors (64 in all) gives scholarly but readable accounts of all possible aspects of the disease, with extensive lists of references. After a brief account of clinical presentation, the largest section of the book is devoted to pathophysiology. Sections on precipitating factors, conservative management (including non-invasive ventilation), and mechanical ventilation follow. The final section entitled "Perspectives" has chapters on new imaging techniques in intensive care, lung transplantation, and decision analysis. This last uses pulmonary embolism as an example to explore the value of diagnostic tests and clinical decision making, so is of more relevance than might appear at first glance. There is very little overlap between chapters, and the book is a mine of useful information. It should be on the library shelf of every hospital to which patients with COPD are admitted. For a volume of nearly 1000 pages, the price is not unreasonable but is probably beyond the budget of the individual reader. – WK

Manual of Clinical Problems in Pulmonary Medicine. 4th Edition. Richard A Bordow, Kenneth M Moser. (Pp 531; £30.00). UK: Churchill Livingstone, 1995. 0 316 10270 9.

This pocket sized book aims to provide an on the spot reference to patient management. The authors, drawn largely from the University of California San Diego School of Medicine, have contributed 102 chapters in 11 sections. The book has 523 pages and is spiral bound – while weighty for the pocket the pages are easy to turn. Each chapter is only 3–5 pages long, but with 59 lines per page, no subheadings or chest radiographs, and very few figures or tables, the text can be hard going. The 10–30 annotated references per chapter are a valuable feature.

Most aspects of respiratory medicine are covered and the section on special problems, which includes chapters on chronic cough, haemoptysis, and pleural effusion, is quite useful. Other chapters on rehabilitation, preoperative pulmonary evaluation, the solitary pulmonary nodule, and mediastinal mass reflect the clinical emphasis of the book. Some chapters such as that on small airways dysfunction are less clinically useful and the three separate chapters on oxygen might have been combined. The balance of the book is sometimes questionable with, for example, three pages devoted to Goodpasture's syndrome but only two to sarcoidosis.

Its North American origin is reflected in the 12 pages on fungal infections and the emphasis on critical care, with chapters on mechanical ventilation (two), nutritional support, and airway control. Not surprisingly, most quoted statistics, standards, and references are of North American origin and the details of drug therapy generally reflect only those available in the USA – for example, beclomethasone is the only inhaled steroid and breath-activated and dry powder inhalers are not mentioned.

The contents are largely accurate, but I would question the role for fibreoptic bronchoscopy in the management of massive haemorrhage and would like to see definitions of mild, moderate, and severe as applied to asthma and pneumonia. The text tends to be dogmatic and sometimes suggests that only one approach is appropriate when a variety of approaches is the norm – for example, sedation for bronchoscopy.

The book falls halfway between being a textbook and a practical manual and, while useful for those who like a textbook in their pocket, I doubt that the book will have major appeal outside North America. – MW

Cystic Fibrosis Pulmonary Infections: Lessons from around the World. A Bauernfeind, M I Marks, B Strandvik. (Pp 352; $229.00). Switzerland: Birkhausser Verlag AG, 1995. 3-7643-5027-X.

One of the pleasures of international cystic fibrosis meetings is meeting colleagues from around the world and learning from their experience. All are keen to improve the health of their patients and yet it is clear that survival from this condition is very variable, particularly in those areas in which there is a high level of poverty or where it has been difficult to share knowledge and experience. Respiratory disease remains the major cause of mortality and morbidity in cystic fibrosis and in this book there are contributions on management of pulmonary disease from more than 20 countries. This produces fascinating perspectives – for example, in Japan cystic fibrosis is incredibly rare (one in 680 000 births) but survival in this tiny population of known cases is poor. Many countries emphasise the need for specialist cystic fibrosis clinics, good record keeping, and an intensive approach to antibiotic therapy in the event of a respiratory exacerbation. In Denmark intravenous antibiotics are given routinely every three months once *Pseudomonas aeruginosa* is identified. In Melbourne sputum is not cultured routinely unless there is an exacerbation, and children who produce no sputum do not need to do regular physiotherapy if they do lots of exercise. The Italians have passed national laws requiring the development of regional centres and article 3 of law 548 declares: "The Regions shall provide free of charge the medical, technical and pharmaceutical materials necessary . . . and whatever else is considered essential for the home care and rehabilitation of cystic fibrosis patients."

The first six chapters deal with general aspects of pulmonary infections including drug pharmacokinetics and mechanisms of microbial virulence. There is a chapter on the current state of lung transplantation. The whole book is well referenced. Whilst the individual chapters which deal with management of infection in individual countries do not provide much new information, the details of organisation of care in individual countries are fascinating and I suspect this book will be of interest to those who are involved in the care of cystic fibrosis worldwide. – JT

NOTICES

The Dr H M (Bill) Foreman Memorial Fund

The Trustees of the Dr H M (Bill) Foreman Memorial Fund invite applications for grants relating to study in respiratory disease. Limited funds are available for registered medical practitioners to assist in travelling to countries other than their own to study respiratory disease, and also for support of clinical research abroad. Intending applicants should write for further details to Dr Brian H Davies, Llandough Hospital, Penarth, Vale of Glamorgan CF64 2XX, UK.

Second European Forum on Quality Improvement in Health Care

The Second European Forum on Quality Improvement in Health Care will take place in Paris, France on 24–27 April 1997 and will consist of one day teaching courses, invited presentations, posters and presentations selected from submissions and a scientific session. For more information contact: BMA, Conference Unit, PO Box 295, London WC1H 9TE. Telephone: +44 (0) 171 383 6478. Fax: +44 (0) 171 383 6869.