

LETTER TO THE EDITOR

Rifampicin containing antituberculosis medication

We wish to draw attention to the potential for error in the prescribing and dispensation of antituberculous drugs containing rifampicin.

Most prescriptions for patients with tuberculosis contain rifampicin; this drug must be administered with other chemotherapeutic agents, most commonly isoniazid and pyrazinamide, in order to avoid the emergence of drug resistant organisms. Patient compliance is much improved by the prescription of "combination therapy".

Guidelines for the management of tuberculosis are available¹ and the drug regimens specified by the Joint Tuberculosis Committee of the British Thoracic Society are published in every issue of the British National Formulary. The Department of Health has recommended "that all cases of tuberculosis should be supervised until treatment has been completed by, or in collaboration with, a consultant with experience in the management of tuberculosis".² Prescribing errors are nevertheless quite frequently observed, some of which have serious consequences; in a recent example we encountered a patient who had received rifampicin alone for a period of some four weeks instead of the triple combination Rifater. It is our purpose here to draw attention to some of the reasons for the occurrence of such errors and how they might be avoided in the future.

A number of rifampicin containing products are available (table 1). The prefix "Rif-" is common to five of these products. Poor handwriting may result in confusion, especially between Rifater and Rifadin or Rifinah as the lengths of the words are very similar. The doses in which Rifadin and Rifinah are likely to be prescribed are also very similar which adds to the confusion.

The numbers attached to the combination products of rifampicin and isoniazid, Rimactazid and Rifinah, are very misleading. Assigning the numbers "150" and "300" to these products may lead one to believe that two tablets of Rimactazid 150 or Rifinah 150 are equivalent to one tablet of Rimactazid 300 or Rifinah 300, which is not the case. In a pilot survey of nursing staff we found that only 53%

knew that the "150" tablets could not be given where the "300" tablets had been prescribed.

Many of these drug names start with the same letters and are thus very likely to appear next to each other on the shelves of a dispensary and therefore may easily be confused. The use of corporate packaging may further compound the risk of error—for example, Rimactane and Rimactazid are presented in almost identical packaging.

We would like to make the following suggestions for reducing the risk of such errors:

1. The possibility of error due to similarity in product names should be carefully considered when licensing both trade names and approved names of new drugs.
2. Numbers should not be used to identify tablets. Errors associated with drugs which include a number as part of the name have been reported in the literature.³ If a number must be used for the rifampicin/isoniazid combinations it would be more appropriate to use the ratio of the two ingredients as the descriptor rather than the quantity of only one of the ingredients (Rimactazid 150/100 or Rimactazid 300/150).
3. Companies are increasingly using a "corporate" style for drug packaging. This results in the packaging of different drugs produced by the same manufacturer looking very similar, and different strengths of the same drug difficult to identify. Whilst we accept that there is no substitute for reading the label when dispensing or administering drugs, all parties involved in the drug use process should be aware that "human error" does exist and should work towards minimising that risk.

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- 1 Joint Tuberculosis Committee of the British Thoracic Society. Control and prevention of tuberculosis in the United Kingdom: Code of Practice 1994. *Thorax* 1994;49:1193-1200.
- 2 Interdepartmental Working Group on Tuberculosis. Recommendations for the prevention and control of tuberculosis at local level. Department of Health and Welsh Office, 1996: 18.
- 3 Davis NM. Medication errors—watch out for misleading chemical names. *Am J Nursing* 1993;10:14.

Table 1 Rifampicin containing products

Name	Active constituents	Manufacturer
<i>Rifampicin alone</i>		
Rifampicin	Rifampicin 150 mg	APS, Generics
Rifampicin	Rifampicin 300 mg	APS, Generics
Rifadin	Rifampicin 150 mg	Hoechst Marion Roussel
Rifadin	Rifampicin 300 mg	Hoechst Marion Roussel
Rimactane	Rifampicin 150 mg	Ciba
Rimactane	Rifampicin 300 mg	Ciba
<i>Two drug combination</i>		
Rifinah 150	Rifampicin 150 mg Isoniazid 100 mg	Hoechst Marion Roussel
Rifinah 300	Rifampicin 300 mg Isoniazid 150 mg	Hoechst Marion Roussel
Rimactazid 150	Rifampicin 150 mg Isoniazid 100 mg	Ciba
Rimactazid 300	Rifampicin 300 mg Isoniazid 150 mg	Ciba
<i>Three drug combination</i>		
Rifater	Rifampicin 120 mg Isoniazid 50 mg Pyrazinamide 300 mg	Hoechst Marion Roussel

BOOK REVIEW

Infectious Diseases of the Respiratory Tract. Ellis M, ed. (Pp 605; hardback; £125 (US\$200)). UK: Cambridge University Press, 1998. ISBN 0 521 40554 8.

This book aims to be a comprehensive reference resource for all those involved in the diagnosis and care of patients with respiratory infections and, for the most part, it achieves this aim. It is written by some 27 contributors divided between the fields of infectious disease and respiratory medicine. The majority are from the UK with a few from other parts of the world. The editor has written or co-written 13 of the 30 chapters.

It is divided into three sections: diagnosis, host defence and antimicrobials (four chapters); respiratory infections due to major respiratory pathogens (12 chapters); and major respiratory syndromes (14 chapters). This approach provides a good balance. The first section covers the basic principles of respiratory infection and its management, the second will suit those seeking information about the specifics of a particular infection, and the third deals with the practical realities of the clinical setting of, for example, hospital acquired pneumonia or respiratory infection in children. There is a wealth of detail in each chapter which, for the most part, are well laid out. I enjoyed the section on areas for research in the chapter on pneumococcal pneumonia; it would have been nice to have seen a similar discussion in subsequent chapters and the book might have benefited from a template approach to the chapters on specific pathogens.

My criticisms are minor. I would not recommend reading the book anywhere other than in a well lit room since the font used is small (8 pt) and there are a number of annoying typographical errors. The order of the chapters is a little odd with non-tuberculous mycobacteria sandwiched between cytomegalovirus and actinomycosis and tuberculosis three chapters later, and upper respiratory tract infections between cystic fibrosis and infections associated with foreign travel. HIV associated respiratory infections merited more space than the 10 pages of text, especially since there is no separate chapter on pneumocystis.

This is a big book both in size (22.5 cm × 28 cm; weight 3 kg) and content to which anyone with an interest in respiratory infection should have access.—ME

NOTICE

ERSPA-ESPACI Meeting

The Joint Meeting of the European Respiratory Society Paediatric Assembly (ERSPA) and the European Society of Pediatric Allergy and Clinical Immunology (ESPACI) will be held in Istanbul on 26-29 May 1999. For further information contact Professor Elif Dağlı, Bağdat Cad 471/1, Suadiye, Istanbul, Turkey. Telephone: +90 216 326 6551, +90 216 411 9044, +90 216 411 9045. Fax: +90 216 326 6551, +90 216 411 9046. e-mail: edagli@superonline.com