

for infections caused by bacteria resistant to multiple other antibiotics ('last-line' drugs). After sustained pressure about this issue the European Union decided to suspend the use of avoparcin as an in-feed antibiotic. Subsequently it was withdrawn from the international market, including Australia. The Europeans have also suspended other in-feed drugs, including virginiamycin, tylosin, spiramycin and bacitracin.

What could or should be done about antibiotic use in animals? Australia has produced a blueprint for tackling this problem.<sup>2</sup> A number of recommendations have been made in the areas of regulation, surveillance and monitoring, infection prevention, education and research. One key recommendation is that of phasing out the long-term, low dose use of antibiotics that can generate resistance to 'last-line' human antibiotics.

The most important feature of the recommendations is that rational antibiotic use is the responsibility of **all** prescribers and users, medical practitioners and veterinarians, patients

and farmers. Antibiotic use of any type and the antibiotic resistance it generates is a public health issue. The use of antibiotics in animals may be making a lesser contribution than inappropriate prescribing to resistance problems in humans. However, all users must endeavour to minimise resistance for the sake of healthy animals, food and humans.

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#### REFERENCES

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2. Joint Expert Technical Advisory Committee on Antimicrobial Resistance (JETACAR). The use of antibiotics in food-producing animals: antibiotic-resistant bacteria in animals and humans. Canberra: Commonwealth Department of Health and Aged Care and the Commonwealth Department of Agriculture, Fisheries and Forestry; 1999 Sept. <http://www.health.gov.au/hfs/pubs/jetacar.htm>
3. Butt H, Bell J, Ferguson J. Are vancomycin-resistant enterococci prevalent in Hunter region farm animals? *Microbiology* 1997;18:A115.

## Letters

Letters, which may not necessarily be published in full, should be restricted to not more than 250 words. When relevant, comment on the letter is sought from the author. Due to production schedules, it is normally not possible to publish letters received in response to material appearing in a particular issue earlier than the second or third subsequent issue.

### Topical ciprofloxacin and antibiotic resistance

Editor, – A generation or so ago, I was taught that if one wanted to render antibiotics useless, due to resistance, as quickly as possible, apply them topically. Why is ciprofloxacin being marketed in this way? Should there not be a full re-evaluation of the use and misuse of all topical antibiotics? Is there any convincing evidence that any of them are a good idea?

Peter Rout

General Practitioner

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*Professor J. Turnidge, Microbiology and Infectious Diseases, Women's and Children's Hospital, Adelaide, comments:*

The concern expressed by Dr Rout about the topical use of ciprofloxacin is shared by many others. The standard teaching comes from the early experience with the use of topical antibiotics to treat infected burns, where resistance emerged rapidly. It is possible that the very high counts of bacteria in infected burns made the selection of resistance easier. Whether this problem occurs with all topical antibiotic use is not clear. The concentrations of topical antibiotics are often 1000 fold higher than the minimal inhibitory concentrations of the bacteria. Thus, in theory, there should be a lower risk of resistance selection than with systemic use.

However, there is another principle that must be taken into account. The rate of resistance selection is related to the total amount of antibiotic use in the community. We should prefer topical drugs which, when resistance is selected, do not jeopardise the valuable systemic antibiotics. Indeed, in the case of fluoroquinolones, strenuous efforts have been made to ensure that availability of the systemic drug is restricted to cases of proven need. Topical application should follow the

same principle. Dr Rout will be pleased to know that the availability of topical ciprofloxacin (and other topical quinolones) has been taken up with national regulators. Although the outcome is not known, we hope that these drugs will be restricted to (rare) cases of proven need.

### Treatment of panic disorder

Editor, – In writing about the 'Treatment of panic disorder' (Aust Prescr 2000;23:124–6) Professor Tiller provides the standard definition used in psychiatry. The definition ignores the most outstanding characteristic of panic disorder and panic attacks: over-breathing. Indeed, the Diagnostic and Statistical Manual (DSM) does not provide a diagnosis for hyperventilation disorder which is a common affliction in the community and certainly so among those with mental disorders.<sup>1</sup> Caught in this bind, Professor Tiller arrives at the task of management without any theoretical explanation of the measures he advocates.

I intend no criticism of the author. The fact that he deals with hyperventilation at all shows that he is well ahead of his academic colleagues and most working in the field. He has rediscovered the wheel earlier than they. The part that hyperventilation disorder played received full acknowledgment long ago<sup>1</sup> and the symptoms of cerebral hypoxia caused by cerebral vasoconstriction were explained in the 19th century. All that knowledge disappeared in the face of psychopharmacotherapy. Psychiatrists have discarded the simple clinical recognition of the deep breaths taken by the anxious patient, the revealing account of light-headedness, pins and needles in the periphery, pain in the left side of the chest, the lump in the throat, palpitations and panic. Instead of restoring normal breathing and confidence, doctors now take out the prescription pad and a reversible process becomes irreversible.

Advanced as he is in rediscovering the wheel, Professor Tiller still has not quite grasped the principles of restoring normal breathing. Normal breathing is not deep. It is abdominal (diaphragmatic) rather than thoracic. Few people have paper bags these days. A plastic bag does just as well and does not make the noise which the author finds socially unacceptable. Tying a piece of tubing into the neck makes it easier to use it as a re-breathing bag. The real reason for not using it is that in most cases correct diagnosis, reassurance and instruction in normal breathing is all that is needed.<sup>2,3</sup>

David S. Bell  
Psychiatrist  
Mosman, NSW

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1. Kerr WJ, Dalton JW, Glielbe PA. Some physical phenomena associated with the anxiety states and their relation to hyperventilation. *Ann Int Med* 1937;11:961-92.
2. Cluff RA. Chronic hyperventilation and its treatment by physiotherapy: discussion paper. *J R Soc Med* 1984;77:855-62.
3. Lum LC. Hyperventilation and anxiety state. *J R Soc Med* 1981;74:1-4.

*Professor JWG Tiller, author of 'Treatment of panic disorder', comments:*

Dr Bell is correct that the DSM does not emphasise over-breathing as a common characteristic of panic. This diagnostic classification tries to differentiate disorders, so it omits features such as over-breathing which may occur in several disorders. I used DSM IV as it is the most common diagnostic system used in Australian psychiatry. I did not attempt a treatise on respiration, notwithstanding my interest in this area.<sup>1</sup>

When faced with hyperventilation, in getting patients to focus on slow, deep breaths, I have not assumed what they might regard as 'normal breathing'. A slow respiratory rate is one element. If patients use slow shallow breathing they simply shift air predominantly in their dead space. They feel they are suffocating and their panic is reinforced. Hence the recommendation for slow, deep breathing as the first step in restoring normal breathing. The immediate response to hyperventilation may be exaggerated before 'normal' diaphragmatic breathing is re-established.

I would not argue on the popularity of different types of bag, paper, plastic or otherwise. Nevertheless, it would be a spectacular sight to see a patient in the middle of public transport tying a tube into the neck of a plastic bag and then breathing in and out. I would suggest that this would be somewhat attention-grabbing and embarrassing.

My paper focused on psychological interventions rather than pharmacological, as the former will suffice for most patients. However, pharmacotherapy can be uniquely efficacious for some disabled individuals. In my review, rather than rediscovering the wheel, I hope I have simply given it a further push in what may be generally the right direction.

REFERENCE

1. Tiller J, Pain M, Biddle N. Anxiety disorder and perception of inspiratory resistive loads. *Chest* 1987;91:547-51.

Editor, – The article on Panic disorder (*Aust Prescr* 2000;23:124–6) had its relevance enhanced by the subsequent commentary by comedian Garry McDonald, wherein reference was made to a book by Bronwyn Fox 'Anxiety attack: don't panic'. A footnote pointed out that this book was out of print.

However there is a more recent book by the same author on the same subject – 'Power over panic'<sup>1</sup> – with a foreword by Garry McDonald. I believe it would be a worthy substitute for the now unobtainable earlier book.

Anthony Martin  
Endodontist  
Sydney

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1. Fox B. Power over panic: freedom from panic/anxiety related disorders. Melbourne: Longman; 1998.

**Ancestim**

Editor, – Thank you for including the notes on ancestim (Stemgen) in the New drugs section (*Aust Prescr* 2000;23:137).

We wish to point out that the approved product information states that ancestim is indicated for use in combination with filgrastim only. There have been no clinical studies of the use of ancestim with a granulocyte colony stimulating factor other than filgrastim.

Jane Campbell  
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**The ethics of rational prescribing**

Editor, – Regarding Dr Max Kamien's letter to the Editor (*Aust Prescr* 2000;23:96) and the response from the Pharmaceutical Society, it seems to me that industry marketing to physicians and pharmacists continues to play a greater part in prescribing than evidence. The 'evidence' used by industry to push new drugs in general and in this case COX-2 inhibitors specifically, is often far from clinically relevant. Statistical significance and clinical relevance are often totally unrelated.

Regarding the pharmacist pushing new drugs (of the same class) onto patients, there is a case in Canada that is possibly on its way to the courts. The doctor prescribed a well-tested non-steroidal anti-inflammatory drug and the pharmacist replaced it with the newer, so-called miracle drug, but the patient did not do well.

Dr Kamien's conclusion is absolutely on the mark. It is neither socially responsive nor ethical for pharmacists to push new drugs. Our patients deserve better.

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