

particularly if the prescribing nurse does not have access to the complete medical records.<sup>4</sup> Equally, problems may arise if drugs prescribed by a nurse are not integrated into a patient's records. However, it is possible that nurse practitioners might be able to minimise the likelihood of patients experiencing adverse events associated with medicine use.

Many general practitioners seem to have reservations about the safety of nurses assuming responsibility for diagnosis and prescribing medications.<sup>2</sup> There may be concerns if the nurse has to prescribe, dispense and administer a drug. In addition, issues around the legal liability of nurse prescribing remain unresolved. There is also a perceived lack of evidence about the costs attributed to a broader range of health professionals being involved in the management of medications. In a UK survey, doctors could not unequivocally conclude that nurse prescribing had reduced the workload.<sup>3</sup>

There is some difficulty in attributing either positive or negative patient outcomes solely to the nurse practitioner.<sup>5</sup> However, there are major benefits such as improved access to healthcare, better nursing assessment and treatment and a high level of

patient acceptance and satisfaction that support the nurse practitioner's role in care. These benefits are likely to be extended if nurse practitioners are able to prescribe.

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## 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.

### Echocardiography

Editor, – It was with great interest that I read the 'Diagnostic tests: Echocardiography' article (*Aust Prescr* 2006;29:134–8), particularly in relation to the ability of this test to differentiate between valvular disease and benign flow murmurs.<sup>1</sup> However, I was surprised that there was no 'Dental note' highlighting the importance of echocardiography in the assessment of patients requiring antibiotic prophylaxis for dental treatment.

A study found that 370 patients out of 20 000 indicated in their medical history that they had a heart murmur or had had rheumatic fever and that they usually received antibiotic prophylaxis for dental treatment.<sup>1</sup> After evaluation of their murmur by electrocardiography and Doppler flow ultrasonography, only 50 had a defect that met current indications for antibiotic prophylaxis for infective endocarditis.<sup>2</sup> Furthermore, the risk of an adverse reaction to the antibiotics and the selection of antibiotic resistant bacterial strains in these patients needs to be considered.

Dental patients reporting an indefinite history of rheumatic fever or cardiac murmur should be referred to their general practitioner, or directly to a cardiologist for diagnosis by echocardiography. This should determine whether or not they require antibiotic prophylaxis for infective endocarditis, in accordance with current guidelines.

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## Xerostomia

Editor, – I found the article on xerostomia (Aust Prescr 2006;29:97–8) to be both timely and informative. As a dentist I have experience in the UK, South Africa and the USA helping patients deal with the problems they experience post-radiotherapy for head and neck cancers.

When I attempt to discuss these issues with my Australian medical colleagues, they commonly reply that no patients experience any problems. This is in contrast to my own records which agree with the figure that 90% of patients suffer problems after radiotherapy.

There are as Professor Olver suggested a number of options being investigated to treat xerostomia. Amifostine is of benefit, but there are problems with the high incidence of nausea associated with its use (50%). The use of antioxidants is currently being investigated by the National Cancer Institute in the USA. Two forms of nitroxide are currently being examined. These are not approved by the US Food and Drug Administration for clinical use, other than for topical use to prevent hair loss and for a number of ophthalmic conditions.

I have had some success in prevention of xerostomia by employing intra-oral screens and other available antioxidants which are currently approved as dietary supplements. This is of course anecdotal and not scientifically proven but better to accept that a problem exists than to be in denial.

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*Professor Ian Olver, author of the article, comments:*

I am pleased that Dr Walsh highlights the importance of recognising the symptomatic distress caused by xerostomia. The symptoms are difficult to manage so prevention is clearly important to investigate. Amifostine as a radioprotector has not been widely used because of its other adverse effects. Nitroxide, an antioxidant and chemoprotective drug acting partly via the p53 suppressor, is a radioprotector which has been shown to reduce radiation-induced xerostomia in mice when used topically in the mouth.<sup>1</sup> It is an excellent candidate for further trials in patients receiving radiotherapy, where it will be important to ascertain that the tumour is not also protected from the radiation. Anecdotal accounts of the efficacy of other drugs are useful in stimulating further clinical research in this field.

## Reference

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Editor, –The recent review of xerostomia (Aust Prescr 2006;29:97–8) with a commentary on the dental implications is timely and informative. The capacity of medication-related xerostomia to destroy the dentition is commonly overlooked by prescribers.

In an unpublished audit of patients requiring full dental clearance at the Royal Adelaide Hospital in 2004, we found that 68 of 92 (74%) had medication-related xerostomia which had destroyed their dentition. By the time the patients had presented to their dentist the condition was unrestorable and once they had their teeth extracted they often had ongoing difficulty with dentures. The patients were taking between one and ten medications, with the average being four. Antidepressants, sedatives and analgesics were the main drugs implicated in their xerostomia.

I have audited 19 patients referred to me for a medicolegal opinion on the relationship of their dental state to a work-related injury. All the patients had chronic work-related musculoskeletal injuries, mainly low back pain, and were found to have xerostomia with adverse oral affects. In 10 of the 19 patients who were on a combination of the older tricyclic antidepressants such as amitriptyline or dothiepin with narcotics (usually morphine sulphate), the dentition had been destroyed in less than one year. Three of the patients admitted to supplementing their analgesia with fairly regular cannabis and probably a number elected not to reveal this information. None of the patients had been warned of the adverse oral effects of their medications or had been advised to seek regular dental care. All presented to a dentist when it was an emergency situation and largely too late to save their dentition.

When drugs that cause xerostomia are prescribed, their effect on oral health should be made clear to the patient and a dental referral should be made.

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