Dental note

Antimicrobial stewardship

Dentists should be aware that the prescription of antibiotics needs to be judicious, especially with growing concerns about antibiotic resistance. According to the Department of Health and Ageing, dentists account for about 3% of antibiotic prescribing. Dentists therefore contribute to antibiotic use within the community and play a role in the development of antimicrobial resistance. In Australia1 and overseas2 dentists have been found to over-prescribe antibiotics, particularly penicillins, as part of dental treatment. Antibiotics may be inappropriately prescribed for dental pain when operative dental treatment is the appropriate management.

An essential strategy to avoid inappropriate antibiotics or inappropriate dose and duration is use of prescribing guidelines such as Therapeutic Guidelines: Antibiotic.3 Dentists can contribute to community education about antibiotic resistance and can also reinforce discussing patient questions about using antibiotics only when indicated, by discussing these matters with their patients. However, the most important contribution that dentists can make in terms of judicious use of antibiotics is to follow prescribing guidelines. In Australia, these guidelines are presented in Therapeutic Guidelines: Oral and Dental.3 These guidelines state in part: 'It must first be determined if an antimicrobial drug is needed. The majority of infections that present in the dental clinic require active dental treatment to remove the source of infection, and this is usually the most effective method of treating the problem.'

Specific guidelines1,5 have been developed for antibiotic prophylaxis in the dental setting. The guidelines for antibiotic prophylaxis for the prevention of infective endocarditis were updated in Australia in 2008 and limit the number of conditions which require antibiotic cover.3,5 Patients with mitral valve prolapse no longer require antibiotic cover for dental treatment. For patients with joint prostheses, the value of antibiotic prophylaxis has not been demonstrated. Prophylaxis is not recommended when the risks of adverse reactions outweigh its benefits.3 Antibiotics should not be prescribed unnecessarily as part of dental treatment. When they are indicated, dentists should follow the published recommendations for antibiotic selection, dose and duration.5

Conflict of interest: none relevant to this article