

RGH Pharmacy E-Bulletin

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A joint initiative of the Patient Services Section and the Drug and Therapeutics Information Service of the Pharmacy Department, Repatriation General Hospital, Daw Park, South Australia. The RGH Pharmacy E-Bulletin is distributed in electronic format on a weekly basis, and aims to present concise, factual information on issues of current interest in therapeutics, drug safety and cost-effective use of medications.

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Revised guidelines for endocarditis prophylaxis

Endocarditis is relatively uncommon but is associated with considerable morbidity and a high mortality rate. For this reason, prevention of the infection is of key importance. The American Heart Association (AHA) first published guidelines for endocarditis prophylaxis in 1955 and since then it has been standard practice for patients with a high lifetime risk of endocarditis who are undergoing high risk procedures to receive antibiotic prophylaxis.

The traditional theory is that bacteraemia following certain types of procedure is thought to lead to endocarditis. This theory actually appears to be based on poor quality evidence (mainly case reports) and thinking has changed in recent times. Antibiotic prophylaxis is actually believed to prevent very few cases and it now seems that bacteraemia associated with daily activities such as teeth cleaning may be more likely to result in infective endocarditis. Many experts are now of the opinion that in a large proportion of cases, the effectiveness of prophylaxis is not sufficiently effective in preventing endocarditis to justify the risk of antibiotic associated adverse effects.

As a result the AHA released revised guidelines in 2007 based on evidence presented at the 2005 and 2006 annual meetings of the AHA, American College of Cardiology and the European Society of Cardiology. In Australia, the Therapeutic Guidelines publications include recently updated Australian guidelines (these are available on-line at <http://www.tg.com.au/uploads/PDFs/Prevention%20of%20endocarditis.pdf>)

The main changes include:

- The list of cardiac conditions for which prophylaxis should be used has been changed to those where there would be the highest risk of adverse outcomes should the patient develop endocarditis. These include those patients with foreign material in the heart, previous endocarditis or certain congenital heart defects. Prophylaxis is no longer recommended solely on lifetime risk. Rheumatic valvular heart disease has been removed from this list but in Australia it has remained for Indigenous Australians. Mitral valve prolapse was the other notable condition removed from the list.
- The list of dental procedures requiring prophylaxis has been condensed to those carrying the highest risk, and also takes into consideration the patient's periodontal condition. For gastrointestinal and genitourinary procedures the list generally only includes those that also require surgical antibiotic prophylaxis.

These changes represent a significant departure from practices that have spanned many years, and some patients may be confused or uncomfortable in accepting this. The new guidelines state that in certain circumstances prophylaxis may be used in individuals not covered by the guidelines (e.g. those who have received prophylactic antibiotics in the past and are unwilling to change). Patients should be encouraged to maintain optimal oral health and hygiene and advised that this is likely to reduce their risk to a greater extent than antibiotic prophylaxis.

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FOR FURTHER INFORMATION – CONTACT THE PHARMACY DEPARTMENT ON 82751763 or email: chris.alderman@rgh.sa.gov.au
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