

ENDOCARDITIS PROPHYLAXIS

FOR DENTAL PROCEDURES

1. Encourage patients with significant cardiac conditions to have a dental examination twice yearly
2. Which cardiac conditions are significant? Do not rely on the presence of a murmur – see table below

Cardiac conditions that have a risk for infective endocarditis with dental procedures		
High-risk	Medium-risk	Low-risk
<ul style="list-style-type: none"> • Prosthetic valves (bioprosthetic or homograft^a) • Previous infective endocarditis • Complex cyanotic congenital heart disease (transposition, tetralogy of Fallot) • Surgically constructed systemic – pulmonary shunts or conduits • Mitral valve prolapse with clinically significant regurgitation. 	<ul style="list-style-type: none"> • Acquired valvular dysfunction (e.g., rheumatic heart disease) • Congenital cardiac malformations other than those defined as high- or low-risk • Hypertrophic cardiomyopathy (HOCM) • Septal defects associated with significant valvular or haemodynamic dysfunction. 	<ul style="list-style-type: none"> • Isolated secundum ASD • Surgical repair of septal defect • Previous coronary artery bypass graft or stent • Mitral valve prolapse without regurgitation • Physiological, functional murmur • Previous Kawasaki disease without valvular dysfunction • Cardiac pacemakers • Pulmonary stenosis • Heart-lung transplant.

a. Transplanted tissue valve, typically porcine

3. Which dental procedures are significant? Bleeding is a poor indicator of bacteraemia – see table below

Dental procedures and their risk of causing bacteraemia		
High-risk	Medium-risk	Low-risk
<ul style="list-style-type: none"> • Extraction • Periodontal procedures including surgery and root planing • Replanting avulsed teeth • Other surgical procedures such as implant placement, apicoectomy. 	<ul style="list-style-type: none"> • Periodontal probing • Intraligamentary and intraosseous local anaesthetic injection • Supragingival calculus removal/ cleaning • Rubber dam placement with clamps (if risk of damaging gingiva) • Restorative matrix band/strip placement • Endodontics beyond the apical foramen • Placement of orthodontic bands • Placement of interdental wedges • Subgingival placement of retraction cords, antibiotic fibres or antibiotic strips. 	<ul style="list-style-type: none"> • Oral examination • Infiltration and block local anaesthetic infection • Restorative dentistry • Supragingival rubber dam clamping and placement of rubber dam • Intracanal endodontic procedures • Removal of sutures • Impressions and construction of dentures • Orthodontic bracket placement and adjustment of fixed appliances • Application of gels • Intraoral radiographs • Supragingival plaque removal.

4. Determine the need for prophylaxis

Need for antibiotic prophylaxis			
	High-risk dental procedure	Medium-risk dental procedure	Low-risk dental procedure
High-risk cardiac condition	Yes	Probable ^b	No
Medium-risk cardiac condition	Probable ^b	Possible ^b	No
Low-risk cardiac condition	No	No	No

b. individual patient decision according to risk e.g., state of periodontal health, extent and duration of procedure

5. Give a single dose of antibiotic before the procedure. There is no proven value in giving a follow-up dose 6 hours later.

First choice:

Amoxicillin 2g (child: 50 mg/kg up to 2g), given

- orally, 1 hour before the procedure, or
- IV, just before the procedure, or
- IM, 30 minutes before the procedure.

If penicillin-allergy or if has taken a penicillin- or cephalosporin-group antibiotic more than once in the previous month:

Clarithromycin^c 500mg (child: 15 mg/kg up to 500mg) orally, 1 hour before the procedure, or

Clindamycin^d 600mg (child 15 mg/kg up to 600mg), given

- Orally, 1 hour before the procedure, or
- IV over at least 20 minutes, just before the procedure.

c. Clarithromycin is currently subsidised for up to 500mg tablet per prescription

d. Clindamycin is currently subsidised for up to 450mg of tablets per prescription or with specialist endorsement (please consult in individual cases). The manufacturer's price for each 150mg tablet is 71 cents.



Based largely on the Australian Therapeutic Guidelines 2006

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