Position Statement of the Arthroplasty Society of Australia

Recommendations for Patients with Hip or Knee Joint Replacement who Require Dental Treatment.

Dental problem in the first 3 months following hip or knee joint placement surgery

Infection with abscess formation: Urgent and aggressive treatment of the abscess. Remove the cause (exodontic or endodontic) under antibiotic prophylaxis.

Pain: Provide emergency dental treatment for pain. Antibiotics are indicated if a high- or medium-risk dental procedure performed.

Noninfective dental problem without pain: Defer non-emergency dental treatment until 3 to 6 months after prosthesis replacement.

Dental treatment after 3 months in a patient with a normally functioning artificial joint
Routine dental treatment including extraction. No antibiotic prophylaxis required.

Dental treatment for patients with significant risk factors for prosthetic joint infection

Immunocompromised patients include:
• those with insulin-dependent diabetes
• those taking immunosuppressive treatment for organ transplants or malignancy
• those with systemic rheumatoid arthritis
• those taking systemic steroids (e.g., patients with severe asthma, dermatological problems)
Consultation with the patient’s treating physician is recommended.

Failing, particularly chronically inflamed, artificial joints:
Consultation with the patient’s treating orthopaedic surgeon is recommended.
Defer non-essential dental treatment until orthopaedic problem has resolved.

Previous history of infected artificial joints:
Routine non-surgical dental treatment – no prophylaxis indicated.

Recommended antibiotic regimens where indicated

1. Dental clinic LA extractions or deep curettage
Amoxycillin 2-3g orally 1 hour prior to procedure
2. Theatre procedures
Amoxycillin 1g I/V at induction
Followed by 500mg amoxicillin I/V or orally 6 hours later.
3. Penicillin hypersensitivity, long term penicillin, recent penicillin/other B-lactam.
Clindamycin 600mg 1 hour prior to procedure or Vancomycin 1g I/V 1 hour to finish 2 hours
or Lincomycin 600mg just prior to the procedure
4. High risk case
(i.e., Gross oral sepsis/severely immunocompromised/previous joint infection.)
Gentamicin 2mg/kg I/V just before procedure (can be administered 3mg/kg provided there is no concomitant renal disease)
PLUS Amoxycillin 1g I/V just before procedure followed by 500mg I/V or orally 6 hours later.
If hypersensitive to penicillin replace amoxicillin with Vancomycin 1g I/V over 1 hour to finish just before procedure.

Ref: Scott JF et al, Patients with artificial joints: do they need antibiotic cover for dental treatment? Aust Dent J 2005:50 Suppl 2S45-S53