

# evidence based guidelines

## DENTAL PROPHYLAXIS AFTER JOINT REPLACEMENT

### General principles

- The chance of oral bacteremia causing a joint infection is low with no clear evidence of an association.
- Evidence does not support that antibiotics provided before oral care will help prevent infections in orthopedic implants.
- Patients with compromised immune systems may be at greater risk for implant infections.

### Consider Pre-dental prophylaxis for the following:

- **Severely Immunocompromised Status:**
  - Stage 3 AIDS (CD4 T lymphocyte counts <200 or opportunistic infection as defined by CDC\*)
  - Cancer patient undergoing chemotherapy with febrile (Celsius 39) neutropenia (ANC <2000) OR severe neutropenia irrespective of fever (ANC <500)
  - Autoimmune disease using biologic disease modifying agents or prednisone >10mg/day (methotrexate and Plaquenil are not considered immunocompromising agents).
  - Solid organ transplant on immunosuppressants
  - Inherited diseases of immunodeficiency (e.g., congenital agammaglobulinemia, congenital IgA deficiency)
  - Bone marrow transplant (until off immunosuppressants, usually ≥ 36 months)
- **History of a Prosthetic Joint Replacement Infection requiring operation**
- **Diabetes Mellitus with poor glycemic control and time since operation <1 year**
  - HbA1c > 8% within last 3-6 months
  - Random blood glucose often ≥ 200

An online Appropriate Use Criteria tool is available at: [orthoguidelines.org](http://orthoguidelines.org)

### Antibiotic choice (given 30-60min prior to procedure):

Preferred:

amoxicillin 2 grams (50mg/kg for children)

If history of an anaphylactic reaction to PCN:

cephalexin 2 grams (50mg/kg for children)

azithromycin/clarithromycin 500mg (15mg/kg for children)

doxycycline 100mg (2.2mg/kg for children <45kg)

\* Revised surveillance case definition for HIV infection—United States, 2014. MMWR. Recommendations and Reports. 2014;63(3):1–10.

References:

American Academy of Orthopaedic Surgeons (AAOS)

American Dental Association (ADA)