

ADA REVIEW JOINT REPLACEMENT ANTIBIOTIC PROPHYLAXIS

Overview

Antibiotic prophylaxis guidelines exist for two groups of patients: those with heart conditions that may predispose them to **infective endocarditis**, and patients who have a **total joint replacement**, who may be at risk for developing hematogenous infections at the site of the prosthetic.

Total Joint Replacement

Guidelines for patients who have a **total joint replacement** were updated by the American Academy of Orthopedic Surgeons (AAOS) in 2009. In 1997, the ADA and the AAOS developed an Advisory Statement on Antibiotic Prophylaxis for Dental Patients with Total Joint Replacements. The Advisory Statement was reviewed and revised in 2003, consistent with the ADA's practice of periodically reviewing all its guidelines to make sure they take into consideration any new information. The 2003 Total Joint Advisory Statement issued by the ADA and AAOS was retired by AAOS consistent with their process requiring review of statements every five years. AAOS issued a new statement in 2009 that consolidates their prophylaxis recommendations for dental and medical procedures. The AAOS 2009 Information Statement differs from the 2003 AAOS/ADA Advisory Statement on the following topics:

- AAOS now states that,

“Given the potential adverse outcomes and cost of treating an infected joint replacement, the AAOS recommends that clinicians consider antibiotic prophylaxis for all total joint replacement patients prior to any invasive procedure that may cause bacteremia.”

By contrast, the 2003 advisory statement recommended antibiotic prophylaxis for all patients within the first two years after replacement surgery only; after two years, the recommendation for prophylaxis was limited to patients who had comorbidities that might place them at increased risk for hematogenous total joint infection (i.e. immunocompromised patients).

- Specific dental procedures that may potentially cause a bacteremia are not identified in the new statement. In the 2003 statement, the following procedures were identified as having a higher incidence of bacteremia: dental extractions; periodontal procedures, including surgery, subgingival placement of antibiotic fibers/strips, scaling and root planing, probing, recall maintenance; dental implant placement and replantation of avulsed teeth; endodontic (root canal) instrumentation or surgery only beyond the apex; initial placement of orthodontic bands but not brackets; intraligamentary and intraosseous local anesthetic injections; prophylactic cleaning of teeth or implants where bleeding is anticipated.
- AAOS does not include a recommendation for an antibiotic regimen for patients who are allergic to penicillin. In the 2003 statement, clindamycin (600 milligrams 1 hour before the procedure) was the recommended antibiotic.

The updated AAOS Information Statement is available here
<http://www.aaos.org/about/papers/advismt/1033.asp>