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**Please talk to your Dentist. You may need to take antibiotics with your procedure.**

### Antibiotic Prophylaxis for Dental Patients with Total Joint Replacements

American Dental Association; American Academy of Orthopaedic Surgeons

An expert panel of dentists, orthopaedic surgeons and infectious disease specialists, convened by the American Dental Association (ADA) and the American Academy of Orthopaedic Surgeons (AAOS) performed a thorough review of all available data to determine the need for antibiotic prophylaxis to prevent hematogenous prosthetic joint infections in dental patients who have undergone total joint arthroplasties. The result is this report, which has been adopted by both organizations as an advisory statement. The panel's conclusion: Antibiotic prophylaxis is not indicated for dental patients with pins, plates and screws, nor is it routinely indicated for most dental patients with total joint replacements. However, it is advisable to consider premedication in a small number of patients (Table 1) who may be at potential increased risk of hematogenous total joint infection.

Any patient with a total joint prosthesis with acute orofacial infection should be vigorously treated as any other patient with elimination of the source of the infection (incision and drainage, endodontics, extraction) and appropriate therapeutic antibiotics when indicated.

Antibiotic prophylaxis is not indicated for dental patients with pins, plates, screws, nor is it routinely indicated for most dental patients with total joint replacements. This position agrees with that taken by the Council on Dental Therapeutics, the American Academy of Oral Medicine, and is similar to that taken by the British Society for Antimicrobial Chemotherapy. There is limited evidence that some immunocompromised patients with total joint replacements (Table 1) may be at higher risk for hematogenous infections. Antibiotic prophylaxis for such patients undergoing dental procedures with a higher bacteremic risk (as defined in Table 2), should be considered using an empirical regiment (Table 3). In addition, antibiotic prophylaxis may be considered when the higher risk dental procedures (as defined in Table 2) are performed on dental patients within two years post implant surgery, on those who have had previous prosthetic joint infections, and on those with some other conditions (Table 1).

The dentist is ultimately responsible for making treatment recommendations for his/her patients based on the dentist's professional judgment. Any perceived potential benefit of antibiotic prophylaxis must be weighed against the known risks or antibiotic toxicity, allergy, and development, selection and transmission of microbial resistance.

#### **Table 1. Patients at Potential Increased Risk of Hematogenous Total Joint Infection.**

##### A. Immunocompromised/immunosuppressed patients

Inflammatory arthropathies: rheumatoid arthritis, systemic lupus, erythematosus  
Disease, drug or radiation-induced arthritis, systemic lupus

(Turn Over)

## B. Other Patients

- Insulin-dependent (Type 1) diabetes
- First two years following joint replacement
- Previous prosthetic joint infections
- Malnourishment
- Hemophilia

### **Table 2. Incidence Stratification of Bacteremic Dental Procedures.**

#### HIGHER INCIDENCE

- Dental extractions
- Periodontal procedures including surgery, subgingival placement of antibiotic
- Fibers/strips, scaling and root planning, probing, recall maintenance
- Dental implant replacement and reimplantation of avulsed teeth
- Endodontic (root canal) instrumentation or surgery only beyond the apex
- Initial placement of orthodontic bands but not brackets
- Intraligamentary local anesthetic injections
- Prophylactic cleaning of teeth or implants where bleeding is anticipated.

#### LOWER INCIDENCE

- Restorative dentistry (operative and prosthodontic) with/without retraction Cord
- Local anesthetic injections (nonintra-ligamentary)
- Intracanal endodontic treatment; post-placement and buildup
- Placement of rubber dam
- Postoperative suture removal
- Placement of removable prosthodontic/orthodontic appliances
- Taking of oral impressions
- Fluoride treatments
- Taking of oral radiographs
- Orthodontic appliance adjustment

1. Prophylaxis should be considered for patients with total joint replacement that meet the criteria in Table 1. No other patients with orthopaedic implants should be considered for antibiotic prophylaxis prior to dental treatment/procedures.
2. Prophylaxis not indicated.
3. This includes restoration of carious (decayed) or missing teeth.
4. Clinical judgment may indicate antibiotic use in selected circumstances that may create significant bleeding.

### **Table 3. Suggested Antibiotic Prophylaxis Regimens**

- Patients not allergic to penicillin or cephalosporins; cephalexin or amoxicillin, 2 grams orally 1 hour prior to dental procedure.
- Patients not allergic to penicillin or cephalosporins and unable to take oral medications: cefazolin 1 gram or ampicillin 2 grams IM/IV 1 hour prior to the procedure.
- Patients allergic to penicillin or cephalosporins: clindamycin: 600 mg. Orally 1 hour prior to the dental procedure.
- Patients allergic to penicillin or cephalosporins and unable to take oral medications: clindamycin 600 mg. IM/IV 1 hour prior to the procedure.

No second doses are recommended for any of these dosing regimens.