

Dental Work and Invasive Procedures After a Joint Replacement

Representatives from the American Dental Association and the American Academy of Orthopaedic Surgeons developed the following recommendations for people with joint replacements who are planning to undergo dental or other invasive (dermatological, GI, GYN, or GU). Because there is little data on this topic, these recommendations are guidelines only. Your dentist, corresponding physician, and your orthopaedic surgeon, working together, will determine an appropriate course of treatment for you.

When do you need preventive antibiotics?

Due to the fact that you have an artificial joint, your risk of contracting a blood-borne infection is higher than normal. Therefore, despite previous guidelines, we feel antibiotics are indicated for all dental procedures.

The current absolute indications for antibiotic prophylaxis include all those with:

- An inflammatory type of arthritis such as rheumatoid arthritis or systemic lupus erythematosus
- An immune system has been weakened by disease, drugs, or radiation
- Insulin-dependent (Type I) diabetes
- A joint replacement less than two years ago
- A previous infection in your artificial joint
- Poor nutrition
- Hemophilia

What procedures require preventive antibiotics?

You should get preventive antibiotics for the following dental procedures:

- Dental extractions
- Periodontal (gum disease) procedures
- Dental implant placement and reimplantation
- Endodontic (root canal) instrumentation or surgery
- Initial placement of orthodontic bands (not brackets)
- Injection of a local anesthetic into the gums near the jaw
- Regular cleaning of teeth or procedure where bleeding is anticipated

You should get preventive antibiotics for the following invasive procedures:

- Gastrointestinal procedures (colonoscopy, EGD, bowel surgery, etc...)
- Genitourinary procedures (catheterization, urethral instrumentation, etc...)
- Dermatological procedures (any invasive procedure that violates the integrity of your skin)
- Gynecological procedures (any invasive procedure that may cause bleeding)

If you are unsure whether your procedure requires antibiotic prophylaxis, please contact our office.

What kinds of antibiotics are suggested?

The following single-dose preventive antibiotics are suggested:

- If you can take oral medications and are not allergic to penicillin, 2 grams of Amoxicillin, Cephalexin, or Cephadrine should be taken one hour before the procedure
- If you are allergic to penicillin, 600 milligrams of Clindamycin should be taken orally or administered by injection one hour before the procedure

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

All patients during the first two (2) years after prosthetic joint replacement
Immunocompromised/immunosuppressed patients
<ul style="list-style-type: none"> - Inflammatory arthropathies (e.g.: rheumatoid arthritis, systemic lupus erythematosus) - Drug -induced immunosuppression - Radiation-induced immunosuppression
Patients with co-morbidities (e.g.)
<ul style="list-style-type: none"> - Previous prosthetic joint infections - Malnourishment - Hemophilia - HIV infection - Insulin-dependent (Type 1) diabetes - Cancer (any)

Table 2. Invasive Procedures Requiring Preventative Antibiotics

<i>You should get preventive antibiotics for the following invasive procedures:</i>
<ul style="list-style-type: none"> - Dental Procedures <ul style="list-style-type: none"> • Dental extractions • Periodontal (gum disease) procedures • Dental implant placement and reimplantation • Endodontic (root canal) instrumentation or surgery • Initial placement of orthodontic bands (not brackets) • Injection of a local anesthetic into the gums near the jaw • Regular cleaning of teeth • Procedure where bleeding is anticipated - Gastrointestinal Procedures <ul style="list-style-type: none"> • Colonoscopy • EGD • Bowel surgery, etc... - Genitourinary Procedures <ul style="list-style-type: none"> • Catheterization • Urethral instrumentation, etc... - Dermatological procedures <ul style="list-style-type: none"> • Any invasive procedure that violates the integrity of your skin - Gynecological procedures <ul style="list-style-type: none"> • Any invasive procedure that may cause bleeding

Table 3. Suggested Antibiotic Prophylaxis Regimens*

Patients not allergic to penicillin: cephalexin, cephadrine or amoxicillin: 2 grams orally 1 hour prior to dental procedure
Patients not allergic to penicillin 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: clindamycin: 600 mg orally 1 hour prior to the dental procedure
Patients allergic to penicillin and unable to take oral medications: clindamycin 600 mg IV, 1 hour prior to the procedure

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