

Title: Total Joint Replacements and Dental Work: What to Consider when Considering Antibiotics

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Date: March 4, 2008

Key words: Joint arthroplasty, infection, dental, antibiotic, prophylaxis

Abstract:

This is a pamphlet designed to help patients and providers decide if antibiotic prophylaxis is appropriate for the patient with a total joint replacement.

This document was created by a medical student enrolled in the Primary Care Clerkship at the University of Minnesota Medical School as part of the course project. The aim of the project is to present information on a medical topic in the format of a patient education handout. It does not necessarily reflect the views of the University of Minnesota Medical School physicians and faculty. These materials are provided for informational purposes only and are in no way intended to take the place of the advice and recommendations of your personal health care provider. The information provided may no longer be up to date since it has not been reviewed since the date of creation. The information provided should not be used to diagnose a health problem or disease, or as a means of determining treatment. In the event of a medical emergency, immediately contact a doctor or call 911.

Dental Procedures with a Lower Incidence of Infection

- Restorative dentistry
- Local anesthetic injections
- Intracranial 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

Dental Procedures with a Higher Incidence of Infection

- Dental extractions
- Periodontal procedures including surgery, subgingival placement of antibiotic fibers/strips, scaling and root planning, probing, recall maintenance
- Dental implant replacement and replantation of avulsed teeth
- 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

Total Joint Replacements and Dental Work

What to Consider when Considering Antibiotics

These guidelines are based on recommendations from the American Academy of Orthopaedic Surgeons and the American Dental Association.

After rehabilitating a total joint replacement, patients and physicians must now work together to protect the new joint from infection. Infections are a rare complication but when they do occur they can be devastating. Infections often require intravenous antibiotics, hospitalization, more surgery and in extreme cases, loss of the joint.

One way joint replacements are known to become infected is by bacteria spreading through the blood stream. One common way people get bacteria in their blood is with routine dental work. This can sometimes release enough bacteria from the mouth into the blood stream that some people can develop infections of their joint replacements.

To help prevent these infections some people may benefit from taking antibiotics before they see the dentist. The American Academy of Orthopaedic Surgeons and American Dental Association have come together and developed guidelines to recommend for whom antibiotics may be appropriate.

Any patient with an obvious infection in their mouth should have that properly treated before having any dental work done. This will decrease the bacteria in the mouth and decrease the risk of infection after any dental work.

Below are the guidelines available and may be helpful when discussing this with your physician.

Patients at Potential Increased Risk of Experiencing Blood-borne Joint Replacement Infections

- All patients during the first two years following joint replacement
- Immunocompromised and immunosuppressed patients (Inflammatory arthropathies such as rheumatoid arthritis, SLE; drug or radiation induced immunosuppression)
- Patients with comorbidities (Previous joint replacement infections, malnourishment, hemophilia, HIV infection, Type I diabetes, malignancy)