

## Shared Decision Making Tool for Artificial Joint Prophylaxis

A Shared Decision Making Tool promotes the collaborative decision making between patient and clinician for best treatment strategy. It is an additional tool to be used and supplements, but does not replace, informed consent procedures.

### Should I take antibiotics before my dental procedure?

#### Introduction:

You have an orthopaedic implant (joint replacement, metal plates or rods, etc.) from a previous orthopaedic surgery.

- A potential complication of these implants is bacterial infection, which occurs in approximately 1-3 percent of patients. These infections require more surgery as well as antibiotic usage for an extended period of time. Most infections occur around the time of the procedure (within one year), but some have occurred much later.
- In theory, late implant infections are caused by the spread of the bacteria from the bloodstream to the implant. Unfortunately, there is no clear scientific evidence to support this theory. We know that many patients with orthopaedic implants frequently have bacteria in their blood that does not spread to their implants.

Dental procedures have long been considered a potential cause of implant infections even after the initial orthopedic postoperative period. This is because dental procedures can introduce bacteria from the mouth into the bloodstream. However, this fact should be considered in the context that eating and performing oral hygiene at home may also introduce oral bacteria into the blood.

- Traditionally, antibiotics have been provided prior to dental procedures in patients with orthopaedic implants to minimize the bacteria that get into the blood.
- Best evidence, however, does not show that antibiotics provided before oral care help prevent infections of orthopaedic implants.
- The routine use of antibiotics in this manner has potential side effects such as increased bacterial resistance, allergic reactions, diarrhea and may even cause death.

Patients who have compromised immune systems might be at greater risk for implant infections.

- Diabetes, rheumatoid arthritis, cancer, chemotherapy and chronic steroid use are examples suggesting immunosuppression. Please discuss your potential for immunosuppression with your physician or dentist.
- Patients who are immune-compromised might wish to consider antibiotics before dental procedures because of their greater risk for infection.
- Decisions with regard to antibiotic premedication should be made by patients, dentists and physicians in a context of open communication and informed consent.

#### Questions:

##### 1. Patients with orthopaedic implants have which of the following:

- a) 0 percent chance of infection
- b) 0-1 percent chance of infection
- c) 1-3 percent chance of infection
- d) >3 percent chance of infection

##### 2. Most implant infections are:

- a) Related to dental procedures

- b) Occur around the time of surgery
- c) Related to skin infections
- d) Occur long after surgery

**3. Some dental procedures:**

- a) Routinely cause implant infections
- b) Are the primary source of implant infections
- c) Never cause implant infections
- d) Allow bacteria to enter the bloodstream

**4. Routine pre-dental procedure antibiotics are:**

- a) Not supported by current evidence
- b) May be beneficial in certain groups of patients
- c) Associated with other unwanted side effects
- d) All of the above

**Patient Checklist:**

1. I have adequate understanding of implant infections associated with dental procedures: \_\_\_ Yes or \_\_\_ No
2. My physician/dentist has discussed my specific risk factors with me: \_\_\_Yes or \_\_\_No
3. I need further education and discussion on this issue: \_\_\_ Yes or \_\_\_ No
4. I am immunocompromised because I have: (specify condition)\_\_\_\_\_
5. **Based on this educational material and discussion, I will:**
  - a. \_\_\_\_\_ **Not take antibiotics before my dental procedure.**
  - b. \_\_\_\_\_ **Take antibiotics before my dental procedure.**

**Patient Signature:** \_\_\_\_\_

**Patient's Printed Name:** \_\_\_\_\_

**Doctor's Signature:** \_\_\_\_\_