

## Shared Decision Making Tool

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A Shared Decision Making (SDM) 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.

As a useful aid to the AAOS/ADA *Prevention of Orthopaedic Implant Infection in Patients Undergoing Dental Procedures* clinical practice guideline, the Shared Decision Making Tool would engage patients in a decision making process and provide information to further clarify the risks, benefits and alternatives to treatment.

### **SHOULD I TAKE ANTIBIOTICS BEFORE MY DENTAL PROCEDURE?**

#### **Introduction**

You have an orthopedic 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% 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 blood stream to the implant. Unfortunately, there is no clear scientific evidence to support this theory. We know that many patients with orthopedic 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 orthopedic 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, 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 orthopedic implants have which of the following:
  - a. 0% chance of infection
  - b. 0-1% chance of infection
  - c. 1-3% chance of infection
  - d. >3% 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       NO
2. My physician/dentist has discussed my specific risk factors with me:  
 YES       NO
3. I need further education and discussion on this issue:  
 YES       NO
4. I am immunocompromised because I have:  
\_\_\_\_\_
5. Based on this educational material and discussion, I will:  
 Not take antibiotics before my dental procedure  
 Take antibiotics before my dental procedure.

## History of this SDM tool

### Evidence Based Practice Committee

- On September 22 2012, the members of the AAOS Appropriate Use Criteria Committee, the Evidence Based Practice Committee and the Guidelines Oversight Committee unanimously approved the concept of developing a supplementary document, called a Shared Decision Making Tool, as a companion to the AAOS/ADA Evidence-Based Guideline on *Prevention of Orthopaedic Implant Infection in Patients Undergoing Dental Procedures*.
- A draft of this tool was shared with all members of the committee who had the opportunity to provide comments and feedback.

### AAOS/ADA CPG Workgroup

- The chairs of the workgroup (Dr. Watters and Dr. Rethman) provided feedback to Dr. Jevsevar on the draft of the shared decision making (SDM) tool.
- On October 16 2012, the chairs sent the SDM tool to the members of the work group and requested comments and feedback.

### Council on Research and Quality

- The SDM tool was shared with the members of the Council on Oct 26 2012 as information only; and to obtain feedback. Because the plan is to publish it as a tool, or an example that others can modify, it was decided that it did not need official AAOS endorsement.

## General Background information regarding shared decision making

- PPACA §3506 states that the purpose of shared decision making is to facilitate collaborative processes between patients, caregivers or authorized representatives, and clinicians that engages the patient, caregiver or authorized representative in decision making, provides patients, caregivers or authorized representatives with information about trade-offs, risks and benefits among treatment options, and facilitates the incorporation of patient preferences and values into the medical plan<sup>1</sup>.
- Shared decision making (SDM) is a collaborative process that allows patients and their providers to make health care treatment decisions together, taking into account the best scientific evidence available, as well as the patient's values and preferences. SDM honors both the provider's expert knowledge and the patient's right to be fully informed of all care options and the potential harms and benefits. This process provides patients with the support they need to make the best individualized care decisions, while allowing providers to feel confident in the care they prescribe<sup>2</sup>.
- A growing body of research shows that when patients are well informed and play a significant role in deciding how they are going to treat or manage their health conditions, things work out better. Informed patients feel better about the decision process. Their decisions are more likely to match up with their preferences, goals and concerns<sup>3</sup>

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<sup>1</sup> <http://housedocs.house.gov/energycommerce/ppacacon.pdf>

<sup>2</sup> <http://informedmedicaldecisions.org/what-is-shared-decision-making/shared-decision-making-resources>

<sup>3</sup> Barratt A. Evidence Based Medicine and Shared Decision Making: the challenge of getting both evidence and preferences into health care. *Patient Educ Couns.* 2008 Dec;73(3):407-12. Epub 2008 Oct 8.