

Family Medicine Clerkship Plain Language Summary Template

Title: Does the dentist cause joint replacement infections? Can medications help prevent those infections??

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Plain Language Summary:

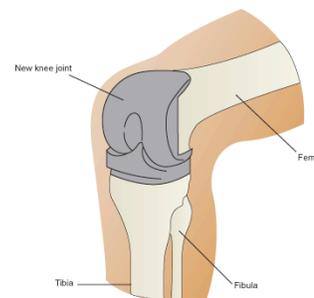
**the language in this summary is at a higher level than a 6th grade level. Much of this assumes that patients were educated about the basics of knee joint replacement surgery and what it means for their life after the surgery, and thusly insinuates that their previous healthcare exposure has already increased their healthcare acumen above the average patients' knowledge level.*

Living organisms known as bacteria sometimes infect new knee or hip joints. They cannot be seen with your eyes because they are very tiny, but they are everywhere around us! This includes all the surfaces of your body, including your mouth.

Bacteria can get into our blood by anything that causes breaks in our outside body coverings, and those coverings act like one big wall to prevent bacteria from marching into our bodies. When these bacteria make it into our bloodstream, it has the ability to travel around your body by floating along inside your arteries and veins. One of the most common examples of a break in our defensive body wall is by getting a cut in your skin. Another example is from damaging your gums by flossing or brushing your teeth. The bleeding in your mouth means that the defensive wall has been broken and bacteria can get into your blood. Most people have healthy immune systems that will find the bacteria and kill it before it ever has a chance to get into one of our organs and start an infection. For others, like people with heart valve problems, they have spots in their bodies that their immune system cannot protect so well and they are more likely to get infections from bacteria that have made it into their blood.



Antibiotics are medicines that help our bodies kill bacteria and fight certain infections. Doctors thought for years that taking antibiotics the day before going to the dentist would help lower the chances of patients having their mouth bacteria get into their blood and start an infection. For some patients, like ones with heart valve disease or other medical conditions, antibiotics have been shown to be helpful in stopping those infections from starting. Today, however, some of those ideas have changed. There are new scientific experiments showing that antibiotics taken the day before you go to the dentist's office (in patients just like you!) do not stop infections from starting in your replacement knee or hip. Other new experiments show that going to the dentist does not cause replacement knee or hip infections in the first place. I have



reviewed these experiments and I believe that there is no scientific reason for you to take an antibiotic before your dentist visit. I also have reviewed your medical records and you do not have a medical condition that would make these antibiotics beneficial to you. I believe these antibiotics will not make you healthier, and I believe that taking antibiotics before going to the dentist might actually make you sicker. Reasons for this are:

---Some antibiotics have very bad side effects for our patients. Doctors also cannot predict if or when these bad side effects will happen. We try to avoid these bad side effects as much as possible by not giving antibiotics to patients who would not be healthier by taking them.

---In order to fight the rising costs of American healthcare and, more importantly, help keep your hard-earned money, I try not to prescribe drugs that will not make my patients healthier.

--- Some antibiotics that used to kill bacteria are no longer killing them. We say that these bacteria are now drug-resistant, and they are growing problem around the entire world. Doctors can help prevent some of these drug-resistant bacteria from being created by only giving antibiotics to patients that would be healthier by taking them.

Some doctors disagree with me on my recommendations for you to not take antibiotics before you visit your dentist, and I encourage you to talk to those doctors about why they think antibiotics would be right for you. You should also talk to your dentist and see what his or her opinion is. Feel free to contact me if you have any questions, I would love to help answer them. Health decisions can be very confusing and scary for patients, especially when medical experts disagree about what you should do, and I am more than happy to help clarify any questions you have. Don't be afraid to ask!

Additional Resources:

Disclaimer: There are not a lot of great websites for you to visit if you wish to learn more about your options. This is a topic that scientific experts are debating right now, so the best resources for you would be to talk to your dentist and orthopedic surgeon. Much of the information online is too difficult for most of my patients to understand and may not be very helpful to you in making your decisions. That said, I do not want to discourage you from trying to educate yourself about your health options. If you find anything online that you would like explained better, please do not hesitate to ask!

American Dental Association

<http://www.ada.org/2583.aspx>

Hip Replacement information

<http://www.nlm.nih.gov/medlineplus/ency/article/002975.htm>

Knee Replacement information

<http://www.nlm.nih.gov/medlineplus/ency/article/002974.htm>

Medline Plus, website for general medical information searches:

<http://www.nlm.nih.gov/medlineplus/>

<http://www.dentalcomfortzone.com/template.php?aid=326>
<http://www.limbcenter.com/disorders/infected.asp>

Key Words for an internet search:

These are some of the medical terms used to describe your new joint, and the term used for pre-treating with drugs that fight infection, so these might be useful to use when searching the internet.

Joint prosthesis infections
Artificial joint infections
Joint replacement infections
Antibiotic prophylaxis
Prophylactic Antibiotics

This document was created by a medical student enrolled in the Family Medicine 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.