

## Antibiotic Premedication for Prosthetic Joints

Don't take them. No, take them. No, just take them for the first two years. No, take them after you're 75. No, take them regardless of how old you are or the joint is. No, fill out this risk assessment form and decide if you want to take them. No, don't take them unless you're at death's door . . .

The sad part is, the preceding paragraph isn't a joke, it's been the semi-official line from dentists and orthopedic surgeons for the past 30 years. To understand why we're changing our story on this yet again, a little history. Back in the 1980's, we used to require heart murmur patients to take antibiotics for a couple of days before any dental treatment. Heart valve patients had to get an antibiotic injection, since they were at higher risk. Around 1987, dentists started wondering if maybe artificial joints were at risk like artificial heart valves. I was actually in the vanguard on this, calling local orthopedic surgeons for advice. They said they didn't know, but why not give them a couple of days of antibiotics--so that's what we did. There was no consensus among orthopedic surgeons--some said no drugs, some wanted two doses, some wanted two weeks.

In 1997, the American Association of Orthopedic Surgeons (AAOS) weighed in. They said "No premeds required except during the first two years, and then only if certain risk factors exist." Unfortunately, it wasn't worded clearly, and most people interpreted it to be "Take the antibiotics for the first two years." In 2003, being over 75 was included as a risk factor, so we started making them take premeds, which was not the intention of the guidelines--they wanted people over 75 to take them the *first two years* after joint placement surgery, not indefinitely. There were also some odd duck orthopedic surgeons who wanted different regimens, so we always checked with the surgeon before doing dentistry. (It was about this time that the American Heart Association stopped giving premeds to heart murmur patients.)

In 2009, three orthopedic surgeons walked into a bar.\* They talked it over and decided that dentists weren't knowledgeable enough about joints, and they wanted all *their* joint patients to take premeds forever and ever amen. They subsequently released an "Information Statement" saying that given the risks, it was their opinion everybody needed premeds again. They published this on official AAOS stationery, which made it appear the AAOS had changed its position. That was not the case--AAOS did not subscribe to the statement, and eventually booted the surgeons out of the AAOS for stealing stationery.\*\* Unfortunately, the majority of surgeons and dentists interpreted this to be an official policy change, and started giving drugs again--though we complained about it to the American Dental Association (ADA), asking for some clarification.

In 2013, responding to member input, the ADA and AAOS issued a joint statement which was apparently written by an internet chat group. It said “Maybe we don’t need to premed people, Consider giving some people an antibacterial rinse instead, and Make sure your patients brush and floss regularly.” Not surprisingly this was greeted with jeers by dentists, some of whom asked for their ADA dues to be refunded.\*\*\* In 2014, the ADA created a “Shared Decision Making Worksheet” which we were supposed to give to patients to help them decide whether or not to take premeds. It was so silly that I don’t know of a single dentist who used it--I mean, if the ADA and AAOS couldn’t assess the situation, how could we expect patients to do it from a one page form? Then finally in January of 2015, the ADA issued new guidelines, which were essentially a return to the intent of 1997.

In arriving at this position, the ADA reviewed a large number of studies about late joint infections. There were no convincing studies showing dental care could cause late joint infections. The bacteria involved were almost never those found in the mouth, and there was no consistent chronological correlation with the dental care. Furthermore, there were no studies indicating antibiotics did any good, and there *were* studies that indicated they caused significant harm. In certain high-risk situations--patients with heart transplant-related medications, or severely immunocompromised patients, for example--the risk/benefit seemed to justify taking premeds. However, for the vast majority of artificial joint patients, taking antibiotics for dental care is unwarranted, and the ADA said to stop.

This puts us in a difficult position. There are still a lot of orthopedic surgeons out there who don’t like to be told what to do by a bunch of dentists, and insist that their patients take premeds. But given the scientific evidence, prescribing premeds for dental care is essentially malpractice. You can’t go into your doctor’s office with a cold and ask for antibiotics--it’s inappropriate therapy, and they’ll remind you that you have a virus, so antibiotics wouldn’t help anyway. If we prescribe you premeds, it’s the same situation--they don’t help, and can cause problems. Overuse of antibiotics is one of the reasons they don’t work so well--bacteria have become resistant.

What we’re going to do is, if your orthopedic surgeon insists on your taking premeds, you will need to get the prescription from him or her. If you want to take the pills, just let us know you took them, and we’ll enter that in your chart. After January 1, 2016 we will no longer be prescribing or administering premeds, except in certain case-by-case situations (very elderly and frail, immunocompromised, history of recent joint infection, for example). You’ll be better off if you don’t take the drugs, and it’ll save you having to remember to take them.

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\*I made that part up, but I’m willing to bet there were drinks involved

\*\*They were actually booted for using the AAOS letterhead without approval

\*\*\*Not sure if this happened, but it certainly crossed *my* mind