

Orthopaedic Connection

Are Antibiotics Needed After Total Joint Replacement?

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Transforming patient information into patient understanding.

Total Joint Replacements have been with us for so long they seem fairly commonplace. Total hip replacement of the hip came first pioneered by Dr. John Charnley in England in the 1960s. The knee was the next joint to be replaced several years later and it took off from there, replacing the other large joints as well.

The number of joints being replaced in the United States has increased every year and there seems to be no end in sight.

Underlying Concern – Infection

Infection is one of the very important reasons total joint replacements fail. But how could a total joint replacement get infected since it is not open to the outside? It is all covered up by muscles, ligaments, etc. How can this happen?

Bacteremia. What is that?

Bacteria are everywhere. You can't see them, but they are there. All over our bodies, covering everything we touch. Yuk! It's a good thing we can't see them isn't it? Anyway, there is one place they are not supposed to be. Inside our bodies; tissues, blood stream, bones, etc.

They are, however in our mouth and GI tract, which is OK. These areas are really considered outside the body.

Bacteremia is present when bacteria invade our bloodstream.

A very common way this happens is during dental work. Bacteria get in and begin to circulate. It's the job of our white blood cells to capture and destroy them.

Total Joint Replacement Materials

Joint replacements are metal of different kinds, polyethylene (plastic), and bone cement. All are wonderful materials that make joint replacements possible. We love these materials because they allow us to do so many good things for our patients.

The huge problem is that bacteria love them too. If bacteria find the metal, they can grow on the metal because metal has no blood supply so white blood cells can't get to the bacteria. They hang onto the joint replacement components and continue to multiply.

Joint Infection

When a joint becomes infected it is a very serious problem, because it causes pain, deterioration of the joint and loosening of the total joint parts in the bone. In other words infection wrecks everything we have tried to do for the patient.

Higher Risk

Every total joint replacement patient is at risk to some degree, but some are at an even higher risk.

- Rheumatoid arthritis patients
- Suppressed immune system (as in dialysis patients)

- Excessive weight
- Diabetes
- Cancer patient
- Smokers
- Patient with poor oral hygiene

What To Do?

In one phrase – take antibiotics before dental and certain other invasive procedures that might introduce bacteria into the blood stream. It sounds so simple, but it is very complicated. Everyone seems to have their own plan of what to do.

The American Academy of Orthopaedic Surgeons is my professional society. I follow their guidelines and advice.

I tell my patients to take Keflex 2 grams orally one hour before the procedure. Allergic to Keflex or Penicillin you say. Take Cleocin 600mg orally one hour before the procedure.

The whole problem is much more complicated than I can present here, but I want you to have the basic information. If this information helps you or someone you know avoid a joint infection, it would be a blessing.

Mouth Care

Patients with bad teeth and gums can be at risk constantly because they can have bacteria getting into their blood stream frequently even without a procedure being done. Removal of bad teeth and treating periodontal disease are extremely important in joint replacement patients.

My patients put their trust in me and what I do improves the quality of their lives.

Office Website and Gratiot County Herald Archive

What if there was a whole world of musculoskeletal information at one place? There is! www.orthopodsurgeon.com opens up for you the office website, Your Orthopaedic Connection and the Archive of all previous GCH articles I have written for you, your family and friends.

Please check it out. Do yourself a favor.

Be well.

Dr. Haverbush