

John Smith, MD  
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Dear Dr. Smith,

I am enclosing a reprint of the January issue of JADA related to updated Guidelines for antibiotic prophylaxis prior to dental treatment for patients with prosthetic joint replacements. After the 2012 AAOS/ADA Joint Recommendations, there was much confusion about what clinicians should do and when prophylaxis might be appropriate. As a consequence most orthopedic surgeons and dentists tended to default to the 2003 Guidelines or pre-medicate all patients.

Recognizing the lack of clarity, the ADA appointed an expert panel to re-evaluate the systematic review done by the 2012 panel and any new research. The result was a new Guideline stating "In general, for patients with prosthetic joint implants, prophylactic antibiotics are NOT recommended prior to dental procedures to prevent prosthetic joint infection."

It was clear there is no association between dental procedures and PJI or any protection for PJI from antibiotic prophylaxis. Additionally there is no clinically significant difference in the incidence between bacteremia from dental procedures such as extraction and scaling, and those induced from normal daily activity such as chewing, and brushing teeth. The microbiology of PJI being predominantly *staph* and the oral flora being largely *strep* with very few strains of *staph* explains the lack of association between oral-induced bacteremia and PJI. The overuse of antibiotics has become a real concern due to the increase in resistant organisms as well as adverse effects. It is estimated there are over 500,000 infections and 29,000 deaths per year due to *C. diff*. Recognizing many patients with prosthetic joints are elderly and have other health issues and may have taken antibiotics shortly before dental care, antibiotic prophylaxis may increase their risk for opportunistic infection by *C. difficile*.

In an effort to develop consensus between orthopedic surgeons and dentists to minimize conflicting recommendations and patient confusion, I hope this latest research may persuade surgeons to advise patients to NOT use antibiotic prophylaxis for dental procedures after prosthetic joint surgery. If you recommend prophylaxis and the patient prefers to pre-medicate prior to dental visits, we request your office provide the patient with the prescription. I would be happy to discuss this issue if you would like.

Respectfully,

Thomas M. Paumier DDS

