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New guideline aims to reduce infections in total hip and knee replacement patients

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According to a new guideline released by the American College of Rheumatology (ACR) and American Association of Hip and Knee Surgeons (AAHKS), the risk of joint infection resulting from total hip and knee replacements can be reduced with careful management of anti-rheumatic medications during the perioperative process. The guideline represents the first time rheumatologists and orthopedic surgeons have collaborated to develop recommendations.

"Periprosthetic joint infection remains one of the most common reasons for failure of hip and knee replacement," said Bryan D. Springer, MD, an orthopedic surgeon at the OrthoCarolina Hip and Knee Center in Charlotte, N.C., and AAHKS Education Council Chair, who served as a co-principal investigator for the guideline project. "Because periprosthetic joint infections are associated with such high morbidity and mortality, we felt there was a dire need for perioperative management recommendations that could be subscribed to by both disciplines in order to provide arthritis patients with better outcomes."

The guideline includes eight recommendations regarding when to continue, withhold and re-start medications commonly used to treat inflammatory rheumatic diseases (e.g., rheumatoid arthritis, spondyloarthritis and systemic lupus erythematosus), as well as the optimal perioperative dosing of glucocorticoids. Key recommendations for reducing the risk of infection include:

- Discontinuing biologic therapy prior to surgery in patients with

inflammatory arthritis.
- Withholding tofacitinib for at least seven days prior to surgery in rheumatoid arthritis, spondyloarthritis and juvenile idiopathic arthritis patients.
- Withholding rituximab and belimumab prior to surgery in all systemic lupus erythematosus patients undergoing arthroplasty.

In addition to rheumatology and orthopedic experts, a patient panel was incorporated to ensure the guidelines adequately represented patients' concerns and preferences.

"There was a very clear message from the patient panel that they were willing to deal with flares if it meant reducing their likelihood for infections and other complications," said Susan M. Goodman, MD, a rheumatologist at the Hospital for Special Surgery in New York, who also served as a co-principal investigator. "The panel also noted that this preference could differ in lupus patients where a flare could mean inflammation of the organs, which poses a greater risk to their health than getting an infection from continuing their medications."

ACR guidelines are developed using the Grading of Recommendations Assessment, Development and Evaluation (GRADE) methodology, which sets forth rigorous standards for judging the quality of the available literature and assigns strengths to the recommendations. Due to limited data in some areas, many of the recommendations were low to moderate in strength.

Both the guideline and a separate paper detailing patient insights on perioperative management have been published in *Arthritis Care & Research*, a peer-reviewed medical journal by the ACR and the Association of Rheumatology Health Professionals (a division of the ACR). The guideline and patient panel paper are also available on the ACR website.

Provided by American College of Rheumatology