Debridement, Antibiotic Therapy, and Implant Retention in *Staphylococcus aureus* Prosthetic Joint Infections

To THE EDITOR—We read the article by Lora-Tamayo et al [1] with great interest.
because the authors found a comparably low success rate (55%) of DAIR (debridement, antibiotic therapy, and implant retention) management in cases of *Staphylococcus aureus* prosthetic joint infections. When interpreting the results of the study, however, 3 considerations should be taken into account.

First, we wonder that the authors refer to Zimmerli et al’s recommendations but treated patients against Zimmerli’s rules, that is, application of DAIR to patients with sinus tracts (14% of study patients), those undergoing immunosuppressive therapy (6% of study patients), or those with difficult-to-treat organisms such as methicillin-resistant *S. aureus* (23% of study patients) [2–4]. The study therefore adds to knowledge that application of DAIR to patients who are usually considered ineligible for that procedure is associated with worse outcome.

Second, information regarding exchange of mobile parts (polyethylene exchange), another prerequisite of DAIR, is missing in 44 patients (27%). The authors mentioned that exchanging the polyethylene component of the prosthesis reduced the risk of failure by 33%. Consequently, the number of patients without polyethylene exchange in the group of treatment failures would be of considerable interest, but this number is not reported.

Third, 88% of study patients were treated at some point with rifampin, and the duration of antibiotic therapy was highly variable. The dosage of rifampin was 600 mg (oral or intravenous) per day, which is at odds with previous recommendations (450 mg twice daily) and against pharmacokinetic profiles of rifampin [2, 4].

We conclude that, on the basis of the missing data and the heterogeneity of surgical and antibiotic treatments, great caution should be exercised in transferring the study results reported by Lora-Tamayo et al into clinical practice and assessment of DAIR in patients with *S. aureus* prosthetic joint infection from that study. DAIR should be applied and restricted to the highly selective group of patients as recommended previously by Zimmerli et al [2, 4].

**Note**

**Potential conflicts of interest.** All authors: No reported conflicts.

All authors have submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest. Conflicts that the editors consider relevant to the content of the manuscript have been disclosed.

R. Krause, M. Hoenigl, T. Valentin, and I. Zollner-Schwetz
Section of Infectious Diseases, Department of Internal Medicine, Medical University of Graz, Austria

**References**


Correspondence: Robert Krause, MD, Section of Infectious Diseases, Department of Internal Medicine, Medical University of Graz, Auenbruggerplatz 15, A-8036 Graz, Austria (robert.krause@medunigraz.at).

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