Cement Spacers in Periprosthetic Joint Infection

TO THE EDITOR—We congratulate Dr Iarikov and other authors of the article “Choice and Doses of Antibacterial Agents for Cement Spacers in Treatment of Prosthetic Joint Infections: Review of Published Studies” [1] for exploring an important area in orthopedics.

Periprosthetic joint infection (PJI) continues to place an immense psychological and economic burden on patients and the healthcare system. Thus, the scholarly desire of representatives of the US Food and Drug Administration to address issues related to this dreaded complication is both logical and commendable.

However, the conclusions drawn by Iarikov [1] related to antibiotic-impregnated cement spacers is both concerning and unfounded. We as clinicians, and scholars such as the authors, need to begin questioning the rationale and foundation behind many of our practices. The latter is a welcome step in delivery of cost-effective medical care. The reality of medicine is such that not every aspect of care can be subjected to scientific scrutiny without placing patients at risk. In fact, the basic tenet of the “hypothesis” posed by the authors has never been subjected to a level 1 study either. There is no randomized, prospective study to show that systemic administration of antibiotics is “necessary” during management of PJI. It is only clinical experience and wisdom that calls for such practice. Poly(methyl methacrylate) is an important and effective clinical tool for local delivery of antibiotics and in surgical management of PJI [2–4]. The latter is based on large body of evidence and clinical wisdom. We fully agree with the authors in that no level 1 study exists that has proven the efficacy of antibiotic-impregnated cement spacers in management of PJI. The rationale for adding antibiotics to spacers (granted using different regimen and doses) is in an effort to deliver high doses of local antibiotics, which would then obviate the need for administration of...
high doses of systemic antibiotics with all its untoward consequences. In addition, a cement spacer without antibiotics would be a true “foreign body” carrying the potential of being colonized by infecting organisms and adversely influencing the outcome of surgical care.

The recognition that some common clinical practices, either because of logistic issues or patient safety matters, cannot be scientifically evaluated beseeches the need for reaching consensus among experts. The type or dose of antibiotics to be added to a cement spacer is one such matter that needs expert consensus.

**Note**

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Robert L. Barrack,1 Keith R. Berend,2 Quanjun Cui,3 Thomas K. Fehring,4 Craig J. Della Valle,5 Thorsten Gehrke,6 Adolph V. Lombardi,7 Michael A. Mont,7 Javad Parvizi,8 and Bryan D. Springer4

1Department of Orthopedics, Washington University School of Medicine, St Louis, Missouri; 2Joint Implant Surgeons, Inc, New Albany, Ohio; 3Department of Orthopedics, University of Virginia, Charlottesville; 4OrthoCarolina Hip and Knee Center, Charlotte, North Carolina; 5Rush University Medical Center, Chicago, Illinois; 6Specialist Clinic for Bone and Joint Surgery, Endo-Klinik Hamburg, Germany; 7Sinai Hospital of Baltimore, Maryland; and 8Orthopaedic Surgery at the Rothman Institute, Thomas Jefferson University Hospital, Philadelphia, Pennsylvania

**References**


Correspondence: Javad Parvizi, MD, FRCS, Department of Orthopaedic Surgery, Rothman Institute, 925 Chestnut St, 5th Floor, Philadelphia, PA 19107 (research@rothmaninstitute.com).

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