Correspondence

Similar success rates for single and multiple debridement surgery for acute hip arthroplasty infection

Sir—It is with great interest that we read the article by Moojen et al. (2014). We wish to congratulate the authors and would like to make some comments. The success rates of treatment strategies reported in this retrospective study is high in the single surgical debridement group (88%). The authors speculated that this might have been due to the good antibiotic sensitivity of the infection causing bacteria. Despite this, the review of the data of the patients in the study revealed that cemented hip arthroplasty rate was low especially in the single debridement group. In fact, the success of treating infection in uncemented hip arthroplasty when compared with cemented arthroplasty was reported to be higher in the current literature (Engesaeter et al. 2006) unless antibiotic loaded cement is used. We think that this factor has also played an important role for the success rate of the procedures.

Another point to consider, is that although the authors stated that they might have caused contamination or colonization from skin after repeating surgeries, it is not well supported with laboratory monitorization. We think that presentation of the laboratory data of the patients in this group is mandatory in order to clarify the etiology of high infection rates. For example were there any patients in the multiple debridement group presenting with secondary elevation of serum CRP and ESR levels due to consecutive operations once they reached lowered or normal levels after the first debridement. If so; this is a strong evidence supporting the authors' opinions.

Burak Önvural
Department of Orthopaedics and Traumatology,
Izmir Tepecik Training and Research Hospital, Turkey

Cemal Kazimoglu
Katip Celebi University,
Department of Orthopaedics and Traumatology, Turkey
Correspondence: ckazimoglu2000@yahoo.com

Sir— We would like to thank drs. Önvural and Kazimoglu for their comments on our publication. Please find our responses to their comments below. We are aware of the results presented in the publication from Engesaeter et al (2006). In contrast to what dr. Önvural states, the majority of our patients (30/33 and 28/35, respectively) had a cemented or hybrid hip arthroplasty and only 10 patients an uncemented one. In all patients with cemented components antibiotic-loaded bone cement was used. This was shown to have a protective effect on infection compared to bone cement without antibiotics. Therefore, we do agree that the choice of and type of fixation of the implants may have had an additional beneficial effect on the success rates. However, this effect was comparable for the single and multiple debridement groups.

With regards to the second comment, we generally saw that ESR and CRP decreased during the first 2 weeks in patients from both groups. In the multiple debridement group these numbers increased again after the 2nd and 3rd debridement, most likely as a response to the trauma of surgery. Because of the retrospective nature of our study and the fact that the resistant bacteria found were mainly low-virulent microorganisms not causing a high ESR or CRP, it is difficult to reliably correlate exact lab results with the decision to remove an implant. In clinical practice, this decision was guided by the results of the deep tissue cultures and the advice of the infection specialist, whether in situ treatment was still possible.

We hope our answers further clarified the results.

Dirk Jan F. Moojen
Consultant Orthopaedic Surgeon,
Department of Orthopaedic Surgery and Traumatology,
Onze Lieve Vrouwe Gasthuis, Amsterdam, The Netherlands
Correspondence: D.J.F.Moojen@olvg.nl

Engesaeter L B, Esphaug B, Lie S A, Furnes O, Havelin L I. Does cement increase the risk of infection in primary total hip arthroplasty? Revision rates in 56,275 cemented and uncemented primary THAs followed for 0-16 years in the Norwegian Arthroplasty Register. Acta Orthop 2006;77 (3): 351-8.

Moojen D J, Zwiers J H, Scholtes V A, Verheyen C C, Poolman R W. Entitled Similar success rates for single and multiple debridement surgery for acute hip arthroplasty infection. Acta Orthop 2014; 85 (4): 383-8.

DOI 10.3109/17453674.2014.960139