Comment on Kumar et al.: Are drains required following a routine primary total joint arthroplasty?

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Dear Editor,

I read with great interest the article by Kumar et al. [1] in the October 2007 edition of *International Orthopaedics*.

I totally agree with the conclusion that drains should not be used routinely in arthroplasty for the mentioned reasons; however, I believe knee and hip arthroplasties should be studied separately to obtain reliable conclusions, in particular because there have been different results in the literature between knees and hips in this regard. This should be achievable with the increasing numbers of arthroplasties that have been performed all over the world, and especially in the UK.

A prospective study of 522 patients showed a significant increase in blood transfusion requirements when drains were used ($p=0.042$) [2]. Another well-conducted meta-analysis showed again that drains increase the need for transfusion, as well as increasing pain and delaying mobilisation postoperatively [3]. This retrospective study included only 34 patients undergoing total hip arthroplasty; this is a very small group to detect significant results in all aspects, e.g. blood transfusion requirements ($p=0.13$).

The standardised procedures and perioperative care in this study are points of strength as they enhance the validity of its results. Other studies on different procedures, e.g. simultaneous bilateral THR [4] or uncemented THR [5],

showed similar results in all aspects; which is interesting as it has always been thought that cement reduces the need for transfusion. It looks as though drains have more effect on the need for transfusion than the use of cement.

Drains should not be used routinely in arthroplasty surgery. The operating surgeon should decide intraoperatively whether a drain is needed or not. This decision depends on the type of operation, the state of haemostasis during the operation, the comorbidities and the past medical and drug history of the patient.

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A reply to this letter can be found at <http://dx.doi.org/10.1007/s00264-007-0499-2>.

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