Author's response to reviews

Title: Radiological features do not predict failure of two-stage arthroplasty for prosthetic joint infection: a retrospective case-control study

Authors:

Susanna Dunachie (susie.dunachie@ndm.ox.ac.uk)
James Teh (james.teh@ouh.nhs.uk)
Vivian Ejindu (vivian.ejindu@stgeorges.nhs.uk)
Philip Bejon (pbejon@well.ox.ac.uk)
Hemant Pandit (hemant.pandit@ouh.nhs.uk)
Ivor Byren (ivor.byren@ouh.nhs.uk)

Version: 5  Date: 20 August 2014

Author's response to reviews: see over
Dear Professor and colleagues,

Re: Radiological features do not predict failure of two-stage arthroplasty for prosthetic joint infection: a retrospective case-control study

Thank you for sending the latest reviewers’ comments for this submitted manuscript for publication in BMC Musculoskeletal Disorders. We would like to thank the reviewers again.

• I apologise that the statement about ethics that I put in at your request on manuscript submission in September 2013 was omitted in the manuscript resubmission of April 2014, due to updating the previous version. I have re-inserted the section.
  “There was no research-related contact with patients. In response to our enquiry, our institutional review board (Oxfordshire Research Ethics Committee) advised informed consent and ethical approval was not required. All activity was conducted in accordance with the Declaration of Helsinki, and national and institutional standards.”

Reviewers 1 and 3 did not advise further changes

Reviewer 2 comments

1. I can’t see that the authors have cleared out my concerns regarding this manuscript.
   We have tried to address his concerns in our response of April 18th 2014 as best we can.
2. Additionally it is now not clear why there were only a small collective from the one the authors have already published (Bejon P, Berendt A, Atkins BL, Green N, Parry H, Masters S, McLardy-Smith P, Gundle R,Byren I: Two-stage revision for prosthetic joint infection: predictors of outcome and the role of reimplantation microbiology. J Antimicrob Chemother 2010, 65(3):569-575.)
   The Bejon et al 2010 study reported outcomes for 152 patients undergoing 2-stage revision. Of these, 96% (146) completed 2-stage revision, and of these 20 patients met the definition of treatment failure. We would have liked to include all 20 cases of treatment failure in our case-control study, but could only include those with a minimum of 6 months follow-up data and for whom post 1st-stage plain films were available. Unfortunately this left only 12 cases. This reflects the low failure rate of the 2-stage approach.
3. In this paper they additionally stated that the length of antibiotic treatment was in 18% more than 1 Year. This is maybe due to the time the patients were treated from 1999-2004. Antibiotic therapy post 2nd stage was individualised depending on the surgical, histological and microbiological findings.

Please let me know if we can help with further information.

Dr Susanna Dunachie MRCP FRCPath PhD
Wellcome Trust Intermediate Clinical Fellow, University of Oxford
Honorary Consultant in Infectious Diseases, Oxford University Hospital Trust