Reviewer’s report

Title: The effect of high tibial osteotomy on the results of total knee arthroplasty. A matched case-control study.

Version: 1 Date: 30 April 2007

Reviewer: Nicola Maffulli

Reviewer’s report:

General

This is an interesting manuscript, which suffers from low numbers. This is inevitable, given the underlying conditions

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

Mention should be made of an intrinsic selection bias. Although the authors have matched the patients for several variables, by definition the index patients have had symptomatic osteoarthritis of the operated knee for longer, and therefore it is conceivable that, had the original disease allowed to progress, the changes would have been more advanced than observed.

It should be made clear that HTO allows to 'buy time' before performing a total knee arthroplasty, and, in this respect, the study does show that this has indeed been achieved.

The authors state that knee replacement after HTO was 'more technically demanding as indicated by prolonged operative time and greater blood loss'. The data only show a trend in this respect, and the prolonged operative time and greater blood loss are not necessarily indicative of greater technical difficulty. They could have been the results, for example, of the lesser familiarity of the surgeons with the knees which had undergone HTO. Also, it is not clear whether the TKS operative time included removal of the metalwork used for HTO.

At present, opening wedge HTO is popular. The discussion should mention this, and the possible impact that this technique may have on subsequent TKA

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Discretionary Revisions (which the author can choose to ignore)

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

'I declare that I have no competing interests'