Reviewer's report

Title: Metal backed fixed-bearing unicompartmental knee arthroplasties using minimal invasive surgery: a promising outcome analysis of 132 cases.

Version: 1 Date: 12 April 2015

Reviewer: André Gächter

Reviewer's report:

Major: medial compartment arthritis as indication for UKA. How was it diagnosed (conventional x-ray, one leg standing x-ray, axial patella, arthroscopy, MRI etc)? The patellofemoral joint is not mentioned but seems to be as crucial as an intact ACL. The reader is not just interested to know about radiolucent lines: can one use UKA in cases with additional patello-femoral arthritis, how should one evaluate the opposite compartment (just by x-ray or clinically ?) Are those indications suitable for Valgus-(Varus)-osteotomies ? UKA was chosen regarding age of patient (69+/−9) ?

Rather short follow-up (3.4+/−1.0, doesn't mean 5 years) and 9 different surgeons or at least supervised by 9 surgeons.

"component orientation did not influence clinical outcome(47)" can one insert the implant in varus/valgus or with excessive slope and this is irrelevant?

What means MIS ? A mediopatellar approach was used: just incision of capsule or subvastus ?

the article is difficult to read, too many statistics in the text, better to make more tables.

Level of interest: An article of limited interest

Quality of written English: Acceptable

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