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LETTER TO THE EDITOR

Early functional outcome after subvastus or parapatellar approach in knee arthroplasty is comparable: a performance-based trial with anatomical findings

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Dear Sir,

With much interest we have read the letter to the editor by Maffulli et al. in relation to our study [4].

We must compliment the authors to have studied this paper that well; however, they have missed the intention of the study. The authors question why a short-term trial has been conducted, while literature suggests that long-term trials are needed [3]. The authors kindly reference to this review while our study protocol already had been accepted. We deliberately studied differences the first 6 months of recovery, as already introduced in the title. When designing and conducting the trial, the best-available evidence did not produce conclusions about the first stages after knee replacement in this matter.

Furthermore, it is questioned why the article by Bridgman et al. [2] was not referenced. We have unfortunately not come across this study while writing our paper. Having read it, we find the contents of this paper conflicting with other papers though, by stating that a subvastus approach is beneficial even up to a year. Although recovery after knee arthroplasty continues beyond 6 months and even 1 year, it is very much questionable how soft tissue treatment produces these differences even after 1 year, as there is also evidence that report similarity [3–5].

Maffulli et al. state that the time of follow-up is limited and insufficient for major conclusions. We agree with this comment for statements concerning the long-term effects; nevertheless, we intended to study the early postoperative phase. Moreover, at the time of the design of the trial, it was reported in literature that no functional difference exist after 6 months of follow-up comparing subvastus approach with parapatellar [3]. In this view, the follow-up time was deliberately limited to 6 months, as no study presented early postoperative differences, since this is claimed to be the main advantage of the subvastus approach [5]. This is clearly stated in the first paragraph of the discussion section.

Maffulli et al. also question the sample size used in this study. In the materials and methods section, an a priori power analysis is provided based on the Dynaport Knee Test to evaluate numbers needed that justifies the chosen sample size. Also, a post hoc analysis, based on acquired *P* values, would result in unworkable larger numbers needed. In conclusion, based on more recent literature, we agree with Maffulli et al. and Bourke et al. [1] that more work is needed on this topic, whereas our paper was only intended to study early postoperative differences.

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