

PEER-REVIEW REPORT

Name of journal: World Journal of Orthopedics

Manuscript NO: 58931

Title: Lateral unicompartmental knee arthroplasty: A review

Reviewer's code: 02705968

Position: Peer Reviewer

Academic degree: MD

Professional title: Adjunct Professor, Chief Doctor, Surgeon

Reviewer's Country/Territory: Italy

Author's Country/Territory: United States

Manuscript submission date: 2020-08-20

Reviewer chosen by: Pan Huang (Quit in 2020)

Reviewer accepted review: 2020-10-30 09:20

Reviewer performed review: 2020-10-30 10:09

Review time: 1 Hour

Scientific quality	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input checked="" type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Language quality	<input type="checkbox"/> Grade A: Priority publishing <input checked="" type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
Conclusion	<input type="checkbox"/> Accept (High priority) <input checked="" type="checkbox"/> Accept (General priority) <input type="checkbox"/> Minor revision <input type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Re-review	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Peer-reviewer statements	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous Conflicts-of-Interest: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

This is a good and well-structured overview concerning lateral UKA. Despite this, I suggest the author to deepen the outcome section by considering also the different tibial design (i.e. all poly vs metal backed).

PEER-REVIEW REPORT

Name of journal: World Journal of Orthopedics

Manuscript NO: 58931

Title: Lateral unicompartmental knee arthroplasty: A review

Reviewer's code: 02695131

Position: Peer Reviewer

Academic degree: PhD

Professional title: Research Scientist

Reviewer's Country/Territory: Netherlands

Author's Country/Territory: United States

Manuscript submission date: 2020-08-20

Reviewer chosen by: Pan Huang (Quit in 2020)

Reviewer accepted review: 2020-10-30 12:35

Reviewer performed review: 2020-11-13 14:03

Review time: 14 Days and 1 Hour

Scientific quality	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input checked="" type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Language quality	<input type="checkbox"/> Grade A: Priority publishing <input checked="" type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
Conclusion	<input type="checkbox"/> Accept (High priority) <input checked="" type="checkbox"/> Accept (General priority) <input type="checkbox"/> Minor revision <input type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Re-review	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Peer-reviewer statements	Peer-Review: <input type="checkbox"/> Anonymous <input checked="" type="checkbox"/> Onymous Conflicts-of-Interest: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

I thank the authors for the opportunity to review their interesting manuscript on lateral unicompartmental knee replacement. It is a well written paper which is of interest. However, I do have some remarks. Abstract Nice abstract but there is no mention (and for that, nowhere in the manuscript) of the incidence/prevalence of isolated osteoarthritis of the lateral compartment of the knee. Please provide some detail (with reference) on this issue in the abstract and manuscript. This will allow readers to place the topic of LUKA in the proper context. Also, it is stated (lines 16-17) that the LUKA survivorship is comparable to MUKA. MUKA survivorship however is notably varied, depending on the source of information (registry data, independent research publication or developer associated publications). It would strengthen the manuscript if this was pointed out, rather than just stating that LUKA is comparable to MUKA. Core tip: There is no data provided about the under-utilization of LUKA. The number of patients with isolated osteoarthritis of the lateral compartment of the knee is small and should be compared to the number of LUKA procedures to back up this statement Introduction No comments Review, expanding indications Line 139: Although this section focusses on the outcome comparison between different age groups, for knee arthroplasty patients with a mean age between 61-72, a long term survivorship upwards of 85% can be considered to be mediocre. The authors should provide a bit more insight in this statement. Line 161: I suggest the authors add to the sentence: 'While this study does show promising results of a LUKA in an ACL deficient knee, 3 patients is not enough to offer strong conclusions regarding its efficacy' that this is the case in a selected population (only 70 years and older). Review, pre operative assessment Lines 177-178: this is stated too general. What is this detailed patient history and thorough physical examination? What questions should certainly be asked and what tests should not be omitted from any examination. Please provide more detail Line 263-264: might there be

much selection bias present? What type of study was used: RCT, matched cohort, cases series? Please provide more detail Line 281-282: the authors find that mobile bearing LUKA is not doing very well and that fixed bearing LUKA should be preferred. In general, the manuscript states that LUKA can be quite successful without mentioning that this is the case for fixed bearing LUKA only. I think that in other sections of the manuscript this also should be emphasized, for example in the conclusion section