

PEER-REVIEW REPORT

Name of journal: World Journal of Clinical Cases

Manuscript NO: 75087

Title: Effect of osteoarthritic knee flexion deformity correction by total knee arthroplasty

on the sagittal spinopelvic alignment in Indian population

Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 05395008

Position: Peer Reviewer

Academic degree: MD

Professional title: Doctor

Reviewer's Country/Territory: China

Author's Country/Territory: India

Manuscript submission date: 2022-01-15

Reviewer chosen by: AI Technique

Reviewer accepted review: 2022-02-19 09:08

Reviewer performed review: 2022-03-01 06:40

Review time: 9 Days and 21 Hours

Scientific quality	[] Grade A: Excellent [] Grade B: Very good [Y] Grade C: Good [] Grade D: Fair [] Grade E: Do not publish
Language quality	[] Grade A: Priority publishing [] Grade B: Minor language polishing [Y] Grade C: A great deal of language polishing [] Grade D: Rejection
Conclusion	 [] Accept (High priority) [] Accept (General priority) [] Minor revision [Y] Major revision [] Rejection
Re-review	[]Yes [Y]No



Peer-reviewer	Peer-Review: [Y] Anonymous [] Onymous
statements	Conflicts-of-Interest: [] Yes [Y] No

SPECIFIC COMMENTS TO AUTHORS

This study was aimed to investigate the changes in the SSPs in patients of OA knee with/without KFD undergoing TKA. While it may be of interest, several concerns need to be addressed. 1. In the abstract section: introduction should be changed as "background", and be shorten. 2. In the introduction section: The relation between SSA of the body and TKA should be clarified. 3. In the method section: please explain how the sample size was determined. 4. In the result section: The result of KFA may have been missed.



PEER-REVIEW REPORT

Name of journal: World Journal of Clinical Cases

Manuscript NO: 75087

Title: Effect of osteoarthritic knee flexion deformity correction by total knee arthroplasty

on the sagittal spinopelvic alignment in Indian population

Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 02708249

Position: Editorial Board

Academic degree: PhD

Professional title: Full Professor

Reviewer's Country/Territory: France

Author's Country/Territory: India

Manuscript submission date: 2022-01-15

Reviewer chosen by: Xin Liu (Online Science Editor)

Reviewer accepted review: 2022-03-09 10:36

Reviewer performed review: 2022-03-13 21:11

Review time: 4 Days and 10 Hours

Scientific quality	[] Grade A: Excellent [] Grade B: Very good [Y] Grade C: Good [] Grade D: Fair [] Grade E: Do not publish
Language quality	[Y] Grade A: Priority publishing [] Grade B: Minor language polishing [] Grade C: A great deal of language polishing [] Grade D: Rejection
Conclusion	 [] Accept (High priority) [Y] Accept (General priority) [] Minor revision [] Major revision [] Rejection
Re-review	[Y]Yes []No



Peer-reviewer	Peer-Review: [Y] Anonymous [] Onymous
statements	Conflicts-of-Interest: [] Yes [Y] No

SPECIFIC COMMENTS TO AUTHORS

This study aims at studying changes in the SpinoPelvic Parameters (SSPs) in patients of knee OA with/without Knee Flexion Deformity (KFD) undergoing total knee arthroplasty (TKA). The paper is well written and clear. The imbalance in the size of samples between women and men is not discussed. The sample size of participants is quite limited. Thus, the findings of this study have to be interpreted with caution owing to the small sample size and duration of the study. Even if stated in the title, authors should discuss the ethnic aspects of the study. Symbols should be reviewed: - OA was not defined. -VAS was not defined. 1 Title. Does the title reflect the main subject/hypothesis of the manuscript? Yes 2 Abstract. Does the abstract summarize and reflect the work described in the manuscript? Agree 3 Key words. Do the key words reflect the focus of the manuscript? Agree 4 Background. Does the manuscript adequately describe the background, present status and significance of the study? Agree

5 Methods. Does the manuscript describe methods (e.g., experiments, data analysis, surveys, and clinical trials, etc.) in adequate detail? Agree 6 Results. Are the research objectives achieved by the experiments used in this study? What are the contributions that the study has made for research progress in this field? Agree 7 Discussion. Does the manuscript interpret the findings adequately and appropriately, highlighting the key points concisely, clearly and logically? Are the findings and their applicability/relevance to the literature stated in a clear and definite manner? Is the discussion accurate and does it discuss the paper's scientific significance and/or relevance to clinical practice sufficiently? Agree 8 Illustrations and tables. Are the figures, diagrams and tables sufficient, good quality and appropriately illustrative of the paper contents? Do figures



require labeling with arrows, asterisks etc., better legends? 9 Biostatistics. Does the manuscript meet the requirements of biostatistics? Yes 10 Units. Does the manuscript meet the requirements of use of SI units? Yes 11 References. Does the manuscript cite appropriately the latest, important and authoritative references in the introduction and discussion sections? Does the author self-cite, omit, incorrectly cite and/or over-cite references? No 12 Quality of manuscript organization and presentation. Is the manuscript well, concisely and coherently organized and presented? Is the style, language and grammar accurate and appropriate? 13 Research methods and reporting. Authors should have prepared their manuscripts according to manuscript type and the appropriate categories, as follows: (1) CARE Checklist (2013) - Case report; (2) CONSORT 2010 Statement - Clinical Trials study, Prospective study, Randomized Controlled trial, Randomized Clinical trial; (3) PRISMA 2009 Checklist - Evidence-Based Medicine, Systematic review, Meta-Analysis; (4) STROBE Statement - Case Control study, Observational study, Retrospective Cohort study; and (5) The ARRIVE Guidelines - Basic study. Did the author prepare the manuscript according to the appropriate research methods and reporting? 14 Ethics statements. For all manuscripts involving human studies and/or animal experiments, author(s) must submit the related formal ethics documents that were reviewed and approved by their local ethical review committee. Did the manuscript meet the requirements of ethics?



PEER-REVIEW REPORT

Name of journal: World Journal of Clinical Cases

Manuscript NO: 75087

Title: Effect of osteoarthritic knee flexion deformity correction by total knee arthroplasty

on the sagittal spinopelvic alignment in Indian population

Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 05491705

Position: Peer Reviewer

Academic degree: MSc, PhD

Professional title: Assistant Professor, Director, Physiotherapist

Reviewer's Country/Territory: Greece

Author's Country/Territory: India

Manuscript submission date: 2022-01-15

Reviewer chosen by: Xin Liu (Online Science Editor)

Reviewer accepted review: 2022-03-16 08:03

Reviewer performed review: 2022-03-24 23:08

Review time: 8 Days and 15 Hours

Scientific quality	[] Grade A: Excellent [] Grade B: Very good [] Grade C: Good [Y] Grade D: Fair [] Grade E: Do not publish
Language quality	 [] Grade A: Priority publishing [Y] Grade B: Minor language polishing [] Grade C: A great deal of language polishing [] Grade D: Rejection
Conclusion	 [] Accept (High priority) [] Accept (General priority) [] Minor revision [Y] Major revision [] Rejection
Re-review	[Y]Yes []No



Baishideng **Publishing**

7041 Koll Center Parkway, Suite 160, Pleasanton, CA 94566, USA Telephone: +1-925-399-1568 **E-mail:** bpgoffice@wjgnet.com https://www.wjgnet.com

Peer-reviewer	Peer-Review: [Y] Anonymous [] Onymous
statements	Conflicts-of-Interest: [] Yes [Y] No

SPECIFIC COMMENTS TO AUTHORS

This is an interesting study and to a certain extent adequately planned and executed. Please find my comments and suggestions as follows: The title should be ammended to: Effect of Osteoarthritic Knee' Flexion Deformity Correction by Total Knee Arthroplasty on the Sagittal Spino-Pelvic Alignment in an Indian Population - A Prospective Study Measurement procedures regarding sagittal spino-pelvic alignment were several and appropriately conducted, however some limitations must be acknowledged, like that the lateral radiograph measurements in a neutral standing position of the whole spine was a static capture, not representative of functional performance. Perhaps the degree of pre-operative knee flexion deformity could have also played a role in the pre-operative sagittal spino-pelvic alignment. Also, that other factors may more readily determine the sagittal spino-pelvic alignment, like physical activity exposure related to standing-walking, posture habits in general, and also a long-term body schema memory, establishing a certain deformity permanently (due to a long term knee-flexion contracture), being impossible to reverse even in a three-month post-surgery timeframe.

Also, since the knee arthroplasty was performed unilaterally in several patients, perhaps the authors could have also examined the spino-pelvic alignment in the frontal plane. The knee-spine syndrome is mentioned. To the authors' opinion is the relationship between the 2 body parts described in terms of concomitant deformities or the concomitant pain presence? The definitions of SSPs appear twice in the manuscript (pg.4). Once is more than enough. Pg. 6: "Group A with correction in flexion deformity more than 100 and Group B with correction less than 100". I think the authors mean 10 degrees instead of 100 degrees. Considering the male-female differences present in



SSPs, and since both male and female participants were considered, accounting for gender in the analyses performed in my opinion is necessary. Can the authors provide a power-calculation for the sample selected? The results presented may be non-significant, however they may be under-powered also. In my opinion, the following phrase on pg. 7 should be omitted: "We also did not substantiate the LBP using a score though we did find improvement in LBP in our follow-up." This is novel information-no LBP measurement was described in the method section and also the phrase's meaning is incomprehensible (improvement was found, although a LBP score was not used!)



RE-REVIEW REPORT OF REVISED MANUSCRIPT

Name of journal: World Journal of Clinical Cases Manuscript NO: 75087 Title: Effect of osteoarthritic knee flexion deformity correction by total knee arthroplasty on the sagittal spinopelvic alignment in Indian population Provenance and peer review: Invited Manuscript; Externally peer reviewed Peer-review model: Single blind **Reviewer's code:** 05491705 **Position:** Peer Reviewer Academic degree: MSc, PhD Professional title: Assistant Professor, Director, Physiotherapist Reviewer's Country/Territory: Greece Author's Country/Territory: India Manuscript submission date: 2022-01-15 Reviewer chosen by: Jia-Ru Fan Reviewer accepted review: 2022-04-19 12:21 Reviewer performed review: 2022-04-20 23:55 Review time: 1 Day and 11 Hours [] C = 1 A. Eventlopt [V] C - 1- D. W-1 [] 0

Scientific quality	[] Grade A: Excellent [Y] Grade B: Very good [] Grade C: Good [] Grade D: Fair [] Grade E: Do not publish
Language quality	[Y] Grade A: Priority publishing [] Grade B: Minor language polishing [] Grade C: A great deal of language polishing [] Grade D: Rejection
Conclusion	 [] Accept (High priority) [Y] Accept (General priority) [] Minor revision [] Major revision [] Rejection
Peer-reviewer	Peer-Review: [Y] Anonymous [] Onymous



Baishideng **Publishing**

7041 Koll Center Parkway, Suite 160, Pleasanton, CA 94566, USA **Telephone:** +1-925-399-1568 E-mail: bpgoffice@wjgnet.com https://www.wjgnet.com

statements

Conflicts-of-Interest: [] Yes [Y] No

SPECIFIC COMMENTS TO AUTHORS

All my comments have been appropriately addressed by the authors. The original findings of the manuscript are interesting, settling expectations that by directly influencing Knee flexion deformity other body parts would be influenced as well. This may require meticulous rehabilitation/physical therapy, that the correction of KFD may now allow. The quality of the manuscript is very good and the findings are pragmatic. The longer-term effect of correcting KFD may have to be studied further.