

## **Detailed response to the reviewers**

Dear editors and reviewers,

We deeply appreciate your thoughtful review and comments on our manuscript (Manuscript NO: **76245** entitled "**Anatomy of the anterolateral ligament of the knee joint**").

We have reviewed the comments carefully and revised our manuscript accordingly. The reviewer's comments and questions have been addressed in a point-by-point manner.

Thank you again for your consideration.

Sincerely,

Ki-Mo Jang, MD, PhD.

### **Reviewer #1.**

Scientific Quality: Grade B (Very good)

Language Quality: Grade B (Minor language polishing)

Conclusion: Minor revision

Specific Comments to Authors:

Anatomy of the anterolateral ligament of the knee joint Name of the Journal: World Journal of Clinical Cases Article type: MINIREVIEWS

1 Title. The title reflects the main subject/hypothesis of the manuscript.

**Author response)** Thank you for thoughtful review and comment.

2 Abstract. The abstract summarizes and reflects the work described in the manuscript. However, it needs to be summarized with paraphrasing for improving the quality of language.

**Author response)** Thank you for thoughtful review and comment. We have improved the quality of language in the abstract and paraphrased where possible.

**Author action)** We have revised the abstract according to the reviewer's comments (line 47-62, page 3 in revised manuscript)

Despite remarkable improvements in clinical outcomes after anterior cruciate ligament reconstruction, the residual rotational instability of knee joints remains a major concern. The anterolateral ligament (ALL) has recently gained attention as a distinct ligamentous structure on the anterolateral aspect of the knee joint. Numerous studies investigated the anatomy, function, and biomechanics of ALL to establish its potential role as a stabilizer for anterolateral rotational instability. However, controversies regarding its existence, prevalence, and femoral and tibial insertions need to be addressed. According to a recent consensus, ALL exists as a distinct ligamentous structure on the anterolateral aspect of the knee joint, with some anatomic variations. The aim of this article was to review the updated anatomy of ALL and present the most accepted findings among the existing controversies. Generally, ALL originates slightly

proximal and posterior to the lateral epicondyle of the distal femur and has an anteroinferior course toward the tibial insertion between the tip of the fibular head and Gerdy's tubercle below the lateral tibial plateau.

3 Keywords. the keywords are adequate and reflect the focus of the manuscript.

**Author response)** Thank you for your comment.

4 Background.

Line 76-85 is a long introduction that does not add anything to the reader, please remove it.

**Author response)** Thank you for thoughtful comment. We agree and we will remove it according to your comment.

**Author action)** The first paragraph of the introduction section (line 76-85 in initial manuscript) has been removed according to the reviewer's comment.

Line 99 (presents with positive "pivot shift test") could be replaced by (presents with persistent "pivot shift test")

**Author response)** Thank you for thoughtful review and comment. We will revise it accordingly.

**Author action)** The sentence was revised according to the reviewer's comment (line 111, page 5 in revised manuscript).

Although the outcomes after anterior cruciate ligament (ACL) reconstruction have improved with a better understanding of the anatomy of the ACL and advances in surgical technique,

some patients complain of residual anterolateral rotational instability (ALRI) even after successful ACL reconstruction, which presents with a persistent “pivot shift test.”

## HISTORICAL REVIEW OF THE ALL

## PREVALENCE OF THE ALL

Those sections were very long and could be summarized and re-phrased to a more concise form.

**Author response)** Thank you for thoughtful review and comment. We will revise the mentioned sections (“HISTORICAL REVIEW OF ALL” and “PREVALENCE OF ALL”) according to the reviewer’s comment.

**Author action)** We summarized and rephrased the aforementioned sections (“HISTORICAL REVIEW OF ALL” and “PREVALENCE OF ALL”) to a more concise form according to the reviewer’s comment (line 129-177, pages 6 and 7 in the revised manuscript)

Please see the “HISTORICAL REVIEW OF ALL” and “PREVALENCE OF ALL” sections in revised manuscript.

The review lacks discussing the function of the anterolateral ligament and its rule in anterolateral stability of the knee, could be better if added.

**Author response)** Thank you for thoughtful comment. The aim of this article was to review recent studies regarding the **anatomy of ALL** and present the most accepted findings. Therefore, we have excluded the biomechanical aspects and functions of ALL from the initial manuscript. However, we will add a short section on the function of ALL according to your comment.

**Author action)** We added a short paragraph on the function of ALL (line 288-295, pages 11 and 12 in the revised manuscript)

#### FUNCTION OF THE ALL

Several previous cadaveric and clinical studies have demonstrated that ALL functions as a secondary stabilizer to ACL when it resists the anterior translation and internal rotation of the tibia[45]. Although most studies have found important roles of ALL in the anterolateral rotational stability of the knee joint, some studies have also demonstrated that it has a limited role in rotational stability[2, 45]. Therefore, further biomechanical and clinical studies are needed to clarify the exact role of ALL and its long-term clinical effects.

5 Illustrations and tables. MRI pictures could be of great value with keeping the copyrights of the sources of these photos.

**Author response)** Thank you for thoughtful review and comment. We agree, and will add an original MRI image of ALL as Figure 2.

**Author action)** We have added an MRI image of ALL as Figure 2.

Please see the Figure 2.

6 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?

**Author response)** Thank you for your comment. We have rechecked the references, and they are generally the latest and most pertinent ones. Some are older, however, they were cited as part of the historical review. There is no self-citation. For your reference, reviewer #2 commented that the research gap was not identified and discussed properly with suitable and recent references in Specific Comments to Authors.

7 Quality of manuscript organization and presentation. Very good but language editing is needed as many grammar issues are found.

**Author response)** Thank you for thoughtful review and comment.

**Author action)** The manuscript has been edited for language again according to the reviewer's comment.

## **Reviewer #2.**

Scientific Quality: Grade C (Good)

Language Quality: Grade B (Minor language polishing)

Conclusion: Major revision

Specific Comments to Authors:

The research gap was not identified and discussed properly with suitable and recent references.

**Author response)** Thank you for thoughtful review and comments.

Although the major structures inside and around the knee joint have been minutely explored, the anatomy of the anterolateral aspect of the knee joint has not yet been well established. – Give reference for this statement.

**Author response)** Thank you for your comment. The reference for the above statement is “Pomajzl R, Maerz T, Shams C, Guettler J, Bicos J. A review of the anterolateral ligament of the knee: current knowledge regarding its incidence, anatomy, biomechanics, and surgical dissection. *Arthroscopy*. 2015 Mar;31(3):583-91”.

However, the first paragraph of the introduction, in which this statement was contained (line 76-85 in the initial manuscript), was removed according to the suggestion of reviewer #1. Therefore, the statement was removed as well.

Claes et al. reported the discovery of the anterolateral ligament (ALL) – almost 9 years old reference.

**Author response)** Thank you for your comment. As reviewer #2 noted, the study by Clae et al. was published in 2013 (almost 9 years ago). However, the study is an important and authoritative ALL cadaveric study. Since its publication, numerous other anatomical, biomechanical, and clinical investigations have been performed. Thus, we could not omit it in this review article.

How come this mini review is differing from reference number 21?

**Author response)** Thank you for thoughtful comment. The reference no. 21 (Anatomy of the Anterolateral Ligament of the Knee: A Systematic Review) deals with a similar subject to our

mini review article. The paper was published in 2019 and was based on electronic data survey conducted in January 2018. In this mini review, we cited articles about ALL which have been published more recently. Furthermore, this mini review article also differs from no. 21 as it summarizes the historical aspect of ALL and includes a short paragraph regarding the function of ALL.

### **Editorial Office's Comments.**

#### **(1) Science editor:**

This invited minireview summarized recent studies regarding the anatomy of the ALL and presented the most accepted findings of the anatomy of the ALL among the several controversies. This is an interesting paper but it needs several major revisions before it can be deemed fit for publication.

1. Language editing is needed as many grammar issues are found.
2. The discussion has certain limitations and some points need to be re-written.
3. please provide documents following the requirements in the journal's Guidelines for manuscript type and related ethics: 1 ) Conflict-of-Interest Disclosure Form ; ( 2 ) Copyright License Agreement.

Scientific Quality: C / Language Quality: A / Recommendation: General accept

Language Quality: Grade B (Minor language polishing)

Scientific Quality: Grade C (Good)



**Author response)** Dear Science editor, thank you for thoughtful review and comments. We have thoroughly revised our manuscript according to the reviewers' comments. Although the paper has been previously edited for language, there are still some errors. Thus, after revising the manuscript according to the reviewers' suggestions, it has been edited again by a professional English language editing company. The two requested documents (Conflict-of-Interest Disclosure Form & Copyright License Agreement) will be provided.

**(2) Company editor-in-chief:**

I have reviewed the Peer-Review Report, full text of the manuscript, and the relevant ethics documents, all of which have met the basic publishing requirements of the World Journal of Clinical Case, and the manuscript is conditionally accepted. I have sent the manuscript to the author(s) for its revision according to the Peer-Review Report, Editorial Office's comments and the Criteria for Manuscript Revision by Authors. Please be sure to use Reference Citation Analysis (RCA) when revising the manuscript. RCA is an artificial intelligence technology-based open multidisciplinary citation analysis database. For details on the RCA, please visit the following web site: <https://www.referencecitationanalysis.com/>. Please provide the original figure documents. Please prepare and arrange the figures using PowerPoint to ensure that all graphs or arrows or text portions can be reprocessed by the editor. In order to respect and protect the author's intellectual property rights and prevent others from misappropriating figures without the author's authorization or abusing figures without indicating the source, we will indicate the author's copyright for figures originally generated by the author, and if the author has used a figure published elsewhere or that is copyrighted, the author needs to be authorized by the previous publisher or the copyright holder and/or indicate the reference source and

copyrights. Please check and confirm whether the figures are original (i.e. generated de novo by the author(s) for this paper). If the picture is 'original', the author needs to add the following copyright information to the bottom right-hand side of the picture in PowerPoint (PPT): Copyright ©The Author(s) 2022. Authors are required to provide standard three-line tables, that is, only the top line, bottom line, and column line are displayed, while other table lines are hidden. The contents of each cell in the table should conform to the editing specifications, and the lines of each row or column of the table should be aligned. Do not use carriage returns or spaces to replace lines or vertical lines and do not segment cell content. Please upload the approved grant application form(s) or funding agency copy of any approval document(s).

**Author response)** Dear Editor-in-chief, thank you for conditional acceptance and detailed instructions. We have thoroughly revised our manuscript according to the reviewers' comments. Our manuscript has two original figures. They have been prepared in PowerPoint in a manner that ensures that the graphs or arrows can be reprocessed by the editor. We added the copyright information to the bottom right-hand side of the picture in the PowerPoint file (Copyright ©The Author(s) 2022). The table was remade in a standard three-line form. We will upload the approved grant application form.

**We would like to thank you again for giving us the opportunity to revise our manuscript.**