

RESPONSE TO REVIEWER #1

Thank you for your thoughtful feedback and constructive criticism of our manuscript. We sincerely appreciate your positive acknowledgement of our meta-analysis and systematic evaluation of biceps long head tendon transposition for the treatment of massive and irreparable rotator cuff tears. We fully recognize where our study could be further improved and understand the importance of implementing the modifications you suggested. In response to your comments, we have carefully addressed each of them, provided detailed explanations, and made the necessary revisions. For ease of identification, we have marked these revisions in red and introduced them in the "Response" section. These revisions have greatly improved the quality of the manuscript while maintaining its content and overall structure.

1. The etiology of rotator cuff retears is multifaceted, and it would be beneficial to include information about the timing of post-surgical rehabilitation. I suggest referencing the study at <https://pubmed.ncbi.nlm.nih.gov/25143489/> to support this point.

Response: We express our gratitude for your valuable recommendations regarding the pertinent references. Consequently, we have incorporated the impact of postoperative rehabilitation duration on the occurrence of rotator cuff tears after surgical intervention. Moreover, we have duly acknowledged and cited the references you kindly suggested. The revised content is presented as follows.

Moreover, prior investigations have revealed that distinct rehabilitation modalities and durations exhibit diverse prognostic implications for individuals undergoing arthroscopic repair of rotator cuff tears⁴². In this regard, forthcoming studies could potentially prioritize the evaluation of the influence of diverse rehabilitation approaches on the utilization of LHBT transposition as a therapeutic intervention for the management of MIRCTs.

2. Additionally, the use of high-resolution ultrasound for monitoring rotator cuff tendon tears can have a significant impact on individuals' functional

abilities. I propose that this aspect be briefly mentioned and supported by the study found at <https://pubmed.ncbi.nlm.nih.gov/37539778/>.

Response: We appreciate your insightful comments on our research methods. We agree with and cite the references you recommended. We hope that our revised manuscript addresses your concerns.

In addition, high-quality studies are necessary to evaluate the long-term outcomes of SCR with LHBT transposition, including postoperative pain, function and structural integrity. High-resolution ultrasound investigation may play an important role in this regard⁴³.

3. It is important to ensure that the protocol for the current meta-analysis is properly registered. Please provide details regarding its registration.

Response: We appreciate your constructive suggestions regarding the registration aspect of the meta-analysis. We have submitted our application for registration, but it will take some time for review and waiting time. Thank you again for your valuable comments, which have greatly improved the quality of our work.

4. In Figure 2, it would be helpful to include an explanatory legend that defines any abbreviations used to enhance readers' comprehension.

Response: Thank you very much for your insights and suggestions. We appreciate your point of view regarding the interpretation of Figure 2, which we have explained in detail in the Results section of the manuscript, and the specific methodology is also specified in Materials and Methods.

5. Lastly, please thoroughly explain the rationale for selecting the fixed effect model for data pooling to enhance the clarity and transparency of your methodology.

Response: Thank you for your insightful comments and suggestions. Our detailed explanation of the rationale for choosing a fixed-effects model for data pooling, based on your comments, greatly improves the

methodological clarity and transparency of our article. The revised content is as follows:

If $I^2 \leq 50\%$, multiple similar studies were considered to be homogeneous, the fixed effects model was used to combine the statistical values.

RESPONSE TO REVIEWER 2

Thank you for your comments concerning our manuscript. First, let me express my gratitude for your compliments on our manuscript. These comments have been valuable in ensuring we produce a high-quality manuscript and have also been constructive in guiding our research. Once we received the comments, we reviewed it carefully and made corrections and responses with the hope that they could meet your standards. We have answered comments step by step as follows. The revised parts will be labeled with red and presented within the Response. These changes have substantially improved the quality of our manuscript while preserving the content and general framework.

1. It deals with an important issue and describes technical details of high value. Some language improvements are necessary, with some expressions being awkward: "are required to further assess." etc. .

Response: We are very sorry that our unprofessional use of English has disturbed your reading. We have revised and corrected the problems you mentioned, and we have touched up the manuscript again to correct any awkwardness in the general use of language.

After Revision:

To further evaluate the long-term effects of SCR with LHBT transposition, more high-quality randomized controlled studies are needed.

2. I would strongly suggest adding an anatomic description / graphic of the glenohumeral joint and adjacent structures to enhance readability; eventually a MRI of the same with denoting all structures that are mentioned here.

Response: Thank you for your constructive suggestions on this detail. In our other article "Long Head of the Biceps as a Suitable Available Local Tissue Autograft for Superior Capsular Reconstruction: "The Chinese Way" ", we have added anatomical graphics about the glenohumeral joint and neighboring structures and magnetic resonance imaging of the same, and this article is already in our references.

3. Too much abbreviations in the abstract... I would prefer to avoid these in the abstract; and probably adding an abbreviation section at the end of the paper.

Response: Thanks for your valuable comments, the abbreviations in the abstract section have been annotated, and we have added the abbreviations at the end of the manuscript.