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RESPONSE TO LETTER

Clinical Outcomes of Exercise Rehabilitation for Degenerative Tibial Meniscal Tears: A Systematic Review and Meta-Analysis of Randomized Controlled Trials [Response to Letter]

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Dear editor

Thank you for your valuable feedback and suggestions, which prompted us to thoroughly verify key data and re-evaluate relevant literature. Your insights have been critical in enhancing the rigor and transparency of our study.[1] Below, we address your concerns in detail.

1. Thank you for your reminder. We conducted a thorough review of the data in Figure 1 and identified some issues. Upon further investigation, we confirmed that the search results from the EBSCOhost database indicated 591 records; however, only 483 were actually downloaded and imported into Endnote. The literature search flowchart omitted the screening process for non-randomized controlled trials (n = 35). We have corrected Figure 1, highlighted the revised sections, and ensured that all steps accurately reflect the number and process of retrieval, screening, and inclusion of studies. The revised Study Selection is as follows:

A search of five databases (PubMed, Embase, Web of Science, EBSCOhost, Cochrane Library) using the keywords "exercise therapy" and "degenerative tibial meniscal injury" yielded 650 records, from which 40 duplicate articles were removed. A further screening of 617 articles led to the exclusion of 534 studies due to irrelevance to the topic, animal studies, non-English publications, non-randomized controlled trials, and review articles. After a full-text review of the remaining 83 studies, 71 were excluded for reasons including not being RCTs, the intervention group not receiving exercise therapy, inability to obtain the literature, irrelevance to the topic, and inability to extract data. Ultimately, 12 papers were included in this systematic review and meta-analysis (Figure 1).

2. Thank you for your question. We conducted a thorough review and analysis of the two studies by Østerås et al[2,3] Although both studies originated from the same clinical center and partially overlapped in their timeframes, their research designs and result reporting demonstrated independence. Specifically, is postoperative exercise therapy necessary in patients with degenerative meniscus? A randomized controlled trial with one-year follow-up focused on the necessity of postoperative exercise therapy, while a 12-week medical exercise therapy program leads to a significant improvement in knee function after degenerative meniscectomy; a randomized controlled trial with one-year follow-up emphasized the long-term effects of a medical exercise therapy program on knee function. These two studies addressed different research questions and outcome measures, and their data were not entirely duplicated.

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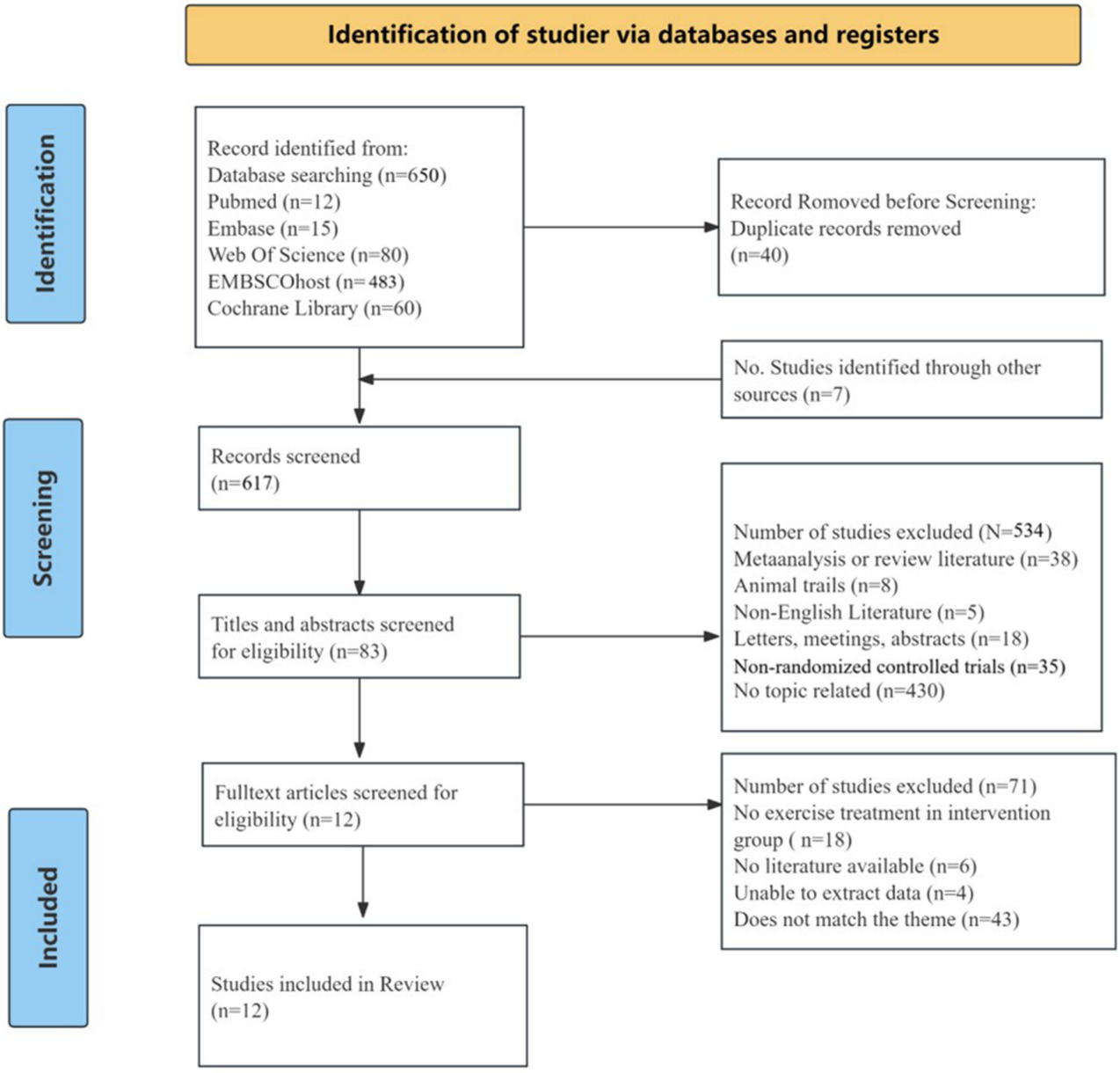

Figure 1 Literature Search Flowchart.

Including both datasets enables a more comprehensive evaluation of the effectiveness of exercise therapy while retaining as much relevant evidence on the treatment of degenerative meniscal injuries as possible. Based on the inclusion and exclusion criteria of our study, we did not exclude studies from the same clinical center or overlapping timeframes. The criteria require the inclusion of studies reporting on patients with degenerative meniscal injuries, with the intervention group receiving exercise therapy and the control group receiving no exercise intervention. Exclusions were limited to non-randomized controlled trials, animal studies, non-English publications, meta-analyses, reviews, and studies with unavailable data. The criteria did not stipulate the exclusion of studies from the same clinical center or overlapping timeframes. Therefore, as long as the studies adhered to randomized controlled trial designs, employed appropriate interventions, and provided extractable data, aligning with the applicability of our criteria.

Regarding the issues with Tables 1 and 2, we understand that your concern may relate to the year annotations in Table 2. To clearly distinguish between the two studies by Østerås H et al, we referred to different time points in their

publication history. One study cited its online publication date (2012), while the other cited its formal publication date (2014). This approach aims to help readers quickly identify and locate the relevant studies while maintaining compliance with academic citation norms. For Østerås H,[3] the online publication date (2012) better reflects the initial release context, so we chose to use 2012. For Østerås H,[2] we adhered to the conventional citation practice of using the formal publication date (2014). This choice does not affect the analysis or conclusions of our study and ensures efficient referencing for readers.

Upon verification, we confirm that the indicator labels for Østerås H[2] in Table 2 should indeed be I, II, III, and IV, instead of I, II, and II,[1] as the "Pain" indicator was inadvertently omitted. We will update Table 2 to include this fourth indicator. Thank you again for your valuable suggestion!

Thank you for your question. We reviewed the two studies by Berg et al, published in 2020[4] and 2022,[5] and re-examined the quality assessment and data accuracy in Table 4. While both studies originated from the same clinical center and shared the same ethics approval (No. 2009/230) and trial registration (ClinicalTrials.gov ID: NCT01002794), their objectives and follow-up periods were distinct. The 2020 study focused on short-term outcomes within three months post-surgery, such as knee function and pain. The 2022 study investigated long-term outcomes over five years, including muscle strength, functional recovery, and osteoarthritis progression.

The "data inconsistencies" in Table 4 stem from differences in reporting and evaluation focus. Our quality assessment, based on the modified Jadad scale, considered aspects such as randomization, allocation concealment, blinding, and dropout reporting. Berg et al provided clear randomization details but lacked sufficient information on blinding and dropout reporting, resulting in a lower score.[4] Berg et al addressed these gaps, offering detailed reporting and earning a higher score.[5] These differences reflect variations in methodological rigor and reporting completeness. We are confident in the robustness of our quality assessment and appreciate your feedback, which helps ensure clarity and transparency.

Disclosure

The authors report no conflicts of interest in this communication.

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