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Letter to the Editor: Eccentric Versus Concentric Exercises in Patients With Rheumatoid Arthritis and Rotator Cuff Tendinopathy: A Randomized Comparative Study

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Dear Editor,

We read the article entitled "Eccentric versus concentric exercises in patients with rheumatoid arthritis and rotator cuff tendinopathy: a randomized comparative study" by Wahba MM, Selim M, Hegazy MM, Elgohary R, Abdelsalam MS with interest. However, we would like to provide some comments regarding its content and methodology reported [1].

Firstly, we would like to draw attention to the title which should be written according to PICO guidelines, it could be reframed as, "To compare the effectiveness of eccentric versus concentric exercises in patients with rheumatoid arthritis and rotator cuff tendinopathy: a randomized clinical trial" [2].

Secondly, we would like to appraise the information provided in the introduction part regarding rotator cuff tendinopathy and its relation to rheumatoid arthritis. Our understanding is expanded by the prevalence, hazard ratio, and a brief discussion of murine models. However, the stated inclusion and exclusion criteria need to be modified. The age bar at which research participants were included and the amount of time since the disease's inception was absent from the inclusion criteria. The presence of deformities like ulnar deviation, boutonniere deformity, swan neck deformity, Z-deformity of thumb, contractures, and limited range of motion, are common in rheumatoid arthritis patients and would make it difficult for them to perform the desired exercises as part of the study intervention, and thus, it is suggested to be added to the exclusion criteria [3]. Nonetheless, we appreciate the authors' reference to the grades of tendinopathy, which clarifies the situation and advances our understanding. The study hypothesis has not been acknowledged by the authors. However, we believe that this should be a two-tailed hypothesis: there might be a significant difference in the efficacy of eccentric and concentric exercises to improve shoulder function, pain, and tendon characteristics in patients with rotator cuff tendinopathy and rheumatoid arthritis, and the null hypothesis could have been there might not be any significant difference in the efficacy of eccentric and concentric exercises to improve shoulder function, pain, and tendon characteristics in patients with rotator cuff tendinopathy and rheumatoid arthritis. Further, the sample size used in the study did not match the calculations made using G*Power parameters, and the text also lacked a study setting.

Third, it would have been preferable if the number of therapy sessions per week—for exam-

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ple, daily or alternately had been specified.

The data analysis was difficult to comprehend because it was unclear, for which outcome measures parametric or non-parametric tests were used [4]. However, the discussion and results are consistent with other recent evidence that supports the notion that eccentric exercises are superior to eccentric exercises in reducing shoulder pain and improving shoulder function in individuals suffering from rotator cuff tendinopathy associated with rheumatoid arthritis.

We are curious about the author's thoughts on these remarks.

CONFLICTS OF INTEREST

No potential conflict of interest relevant to this article was reported.

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REFERENCES

- Wahba MM, Selim M, Hegazy MM, Elgohary R, Abdelsalam MS. Eccentric versus concentric exercises in patients with rheumatoid arthritis and rotator cuff tendinopathy: a randomized comparative study. Ann Rehabil Med 2023;47:26-35.
- Nishikawa-Pacher A. Research questions with PICO: a universal mnemonic. Publications 2022;10:21.
- Ipsita S, Singh P, Mohapatra I, Padhan P. Comparison of the effect of Kinesio Taping adjunctively with hand exercise on improving hand function in early rheumatoid arthritis. J Integr Med Res 2023;1:102-6.
- 4. Portney LG. Foundations of clinical research: applications to evidence-based practice. F.A. Davis Company; 2020. p. 383-522.