



Response: Eccentric Versus Concentric Exercises in Patients With Rheumatoid Arthritis and Rotator Cuff Tendinopathy: A Randomized Comparative Study (*Ann Rehabil Med* 2023;47:26-35)

Mina Magdy Wahba, PhD¹, Mona Selim, PhD², Mohammed Moustafa Hegazy, PhD³, Rasmia Elgohary, MD⁴, Mohammed Shawki Abdelsalam, PhD³

¹Department of Physical Therapy for Orthopedics, Faculty of Physical Therapy, Suez University, Suez, Egypt

²Department of Physical Therapy for Musculoskeletal Disorders and Surgery, Faculty of Physical Therapy, Badr University in Cairo, Cairo, Egypt

³Department of Physical Therapy for Musculoskeletal Disorders and Surgery, Faculty of Physical Therapy, Cairo University, Cairo, Egypt

⁴Rheumatology and Clinical Immunology Unit, Internal Medicine Department, Kasr Alainy School of Medicine, Cairo University, Cairo, Egypt

Dear Editor,

At the beginning, we would like to thank Professor Agarwal et al. for their comments on the article “Eccentric versus concentric exercises in patients with rheumatoid arthritis and rotator cuff tendinopathy: a randomized comparative study” [1]. Regarding the title, though it is better to include PICO in the title, the CONSORT Statement states that the title should identify the article as a randomized trial, and there is no recommendation regarding the PICO [2]. Regardless, the population is clearly explained in the title “Patients with rheumatoid arthritis and rotator cuff tendinopathy.” In addition, control and intervention are stated clearly in the title “Eccentric versus concentric exercises.” Comparing the recommended title to the actual title, no change found other than language editing. It is also important to highlight that the word effectiveness does not add additional meaning to the title as it did not mention which kind of effectiveness. Thus, “effectiveness” cannot be considered as an outcome.

Regarding inclusion and exclusion criteria, the protocol was registered at the National Institute of Health (clinicaltrials.gov) with the number NCT05054920 where more details regarding the inclusion and exclusion criteria can be found. Mean age and disease duration were stated clearly in the results section. In addition, statistical analysis showed that our data were homogeneous.

Since the authors excluded any patients “scheduled for rotator cuff surgery, had a rotator cuff full-thickness tear, or had a shoulder fracture, dislocation, or surgery history,” none of the patients included had limited shoulder internal, external rotation or shoulder abduction range less than 90. Thus, the patients were able to perform the exercises. Though rheumatoid arthritis (RA) is known to affect mainly small joints, large joints, including shoulders, are also affected. Large joints are more frequently affected in elderly onset RA [3]. This could explain the reason for our mean age to be 45.20, 43.65 in group 1 and group 2 and why we did not face any patients

Received: January 24, 2024

Revised: February 12, 2024

Accepted: February 20, 2024

Correspondence:

Mina Magdy Wahba
Department of Physical Therapy for
Orthopedics, Faculty of Physical
Therapy, Suez University, Suez road,
Suez 8151650, Egypt.
Tel: +20-01285170876
Fax: +20-623707068
E-mail: minamagdywahba@gmail.com

with hand deformity preventing them from using the elastic resistance.

We would like to confirm that the sample size was calculated as mentioned in the article using G*Power 3.1, where assuming α (two-sided)=0.05 and $1-\beta=0.80$ based on a similar study assessing the shoulder function at week 3 (primary outcome of the study). It seems that the letter's authors calculated it based on a different parameter or measurement week. It is important to mention that the sample size was clearly mentioned in the registered protocol at the National Institute of Health (clinical-Trials.gov).

The number of sessions and the duration of treatment were mentioned clearly in the article in the procedure section: "Patients received 12 sessions at a pace of three sessions per week with day after day rate."

We also found that the letter's authors referred to the unit defining each outcome in the tables to identify continuous and ordinal data. All our continuous data were homogenous; thus, all continuous data were parametric. We only used non-parametric tests for ordinal data, which were sex and tendinopathy stages.

As mentioned in the discussion, our data support the idea that eccentric was more effective than concentric in improving shoulder pain and function. However, within the study's time frame, we could not detect any change regarding the tendon characteristics between the two groups. What was interesting was that we found the concentric exercise was beneficial in improving subscapularis tendon characteristics. At the same time, eccentric exercise improved supraspinatus tendon characteristics.

CONFLICTS OF INTEREST

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

FUNDING INFORMATION

None.

ORCID

Mina Magdy Wahba, <https://orcid.org/0000-0002-8478-9103>

Mona Selim, <https://orcid.org/0000-0003-2242-9177>

Mohammed Moustafa Hegazy,

<https://orcid.org/0000-0002-5725-3135>

Rasmia Elgohary, <https://orcid.org/0000-0002-4002-1485>

Mohammed Shawki Abdelsalam,

<https://orcid.org/0000-0002-1396-6555>

REFERENCES

1. 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.
2. Cuschieri S. The CONSORT statement. *Saudi J Anaesth* 2019;13(Suppl 1):S27-30.
3. El-Labban AS, Omar HA, El-Shereif RR, Ali F, El-Mansoury TM. Pattern of young and old onset rheumatoid arthritis (YORA and EORA) among a group of Egyptian patients with rheumatoid arthritis. *Clin Med Insights Arthritis Musculoskelet Disord* 2010;3:25-31.