

## REVIEW REPORT

### Title: Effectiveness of low energy extracorporeal shock wave therapy in the treatment of chronic insertional Achilles tendinopathy

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#### Reviewer C: Anonymous, COI: None, AI disclosure: None

1. Comment Redundancy noted as results are repeated in abstract, Key message.

**Response:** We revised the Key Messages section to reduce overlap with the Abstract. Numerical findings and repetitive statements were minimized, and the Key Messages now focus mainly on the principal clinical implication of the study rather than repeating detailed results already presented in the Abstract (Page 3, lines 1-4).

2. Comment It would be better if a control group for comparisons.

**Response:** We agree that inclusion of a control group would have strengthened the study. Since this was designed as a quasi-experimental exploratory study, no control group was included. We therefore revised the Discussion section to explicitly acknowledge this as the main limitation and discussed the possibility of placebo effect and natural recovery. We also clarified that only patients who failed previous conservative treatment were enrolled and that repeated within-patient follow-up was used to partially reduce this limitation (Page 6, lines 24-29; Page 7, lines 16-21).

3. Comment Sample size is not clear, how it was determined.

**Response:** We corrected and clarified the sample-size description. The manuscript now explains that this was a consecutive, feasibility-based hospital study in which all eligible patients presenting during the predefined study period were enrolled. The exploratory nature of the study and the limitation regarding statistical power are also now acknowledged (Page 4, lines 9-14; Page 5, lines 16-21).

4. Comment Figures are not fully self-explanatory, example: explain the parameters of VAS with scoring system, as well as Roles and Maudsley score, and RMS score.

**Response:** We revised the figure captions and corresponding text to improve clarity and self-explanatory value. Short explanations of the Visual Analogue Scale (VAS) and Roles and Maudsley Score (RMS), including their scoring interpretation, were added in the Abstract, Methods, Results, and figure captions (Abstract: Page 2, lines 10-22. Methods: Page 4, lines 25-28. Results: Page 6, lines 1-13. Figure captions: Page 11, lines 2-6; Page 12, lines 2-4).

5. Comment Redundancy of results found in the text.

**Response:** We carefully revised the manuscript to reduce redundancy across the Results, and Discussion sections. The Results section was tightened to emphasize the principal findings and statistical interpretation, while repetitive numerical restatement was reduced. Detailed pairwise findings were shifted mainly to the figure captions (Abstract: Page 2, lines 1-22. Key Messages: Page 3, lines 1-4. Results: Page 5, lines 22-30; Page 6, lines 1-13. Discussion: Page 6, lines 17-31; Page 7, lines 1-9).

6. Comment Strengths: Relevant clinical problem

- Focus on chronic insertional Achilles tendinopathy, a difficult-to-treat condition.
- ESWT is a practical modality in PM&R, especially in LMIC settings like Bangladesh.

Limitations: Quasi-experimental without control group, Improvement could be due to:

- Natural history
- Placebo effect

**Response:** We thank the reviewer for these valuable observations. The Discussion section was revised to better emphasize the clinical relevance of chronic insertional Achilles tendinopathy and the practical applicability of ESWT in PM&R settings, particularly in resource-constrained environments. We also expanded the limitations section to explicitly acknowledge the absence of a control group and the possibility that some improvement may be attributable to natural history or placebo effect (Discussion: Page 6, lines 17-31; Page 7, lines 16-29).

7. Comment Reference duplication (Pavone et al. appears twice), [Ref no 12 and 15 are the same].

**Response:** The duplicate reference entry was removed and the reference list was carefully revised and renumbered accordingly. We also ensured that recent literature remains appropriately emphasized in the revised manuscript (Page 7, lines 23-30; Page 8, lines 1-23).

#### Reviewer E: Anonymous, COI: None, AI disclosure: None

8. Comment Techniques of sample selection was not described in the Abstract.

**Response:** This has now been included in the Methods section.

9. Comment The study was described as Quasi-experimental, where sample selection should be done randomly.

**Response:** The manuscript now explains that this was a consecutive, feasibility-based hospital study in which all eligible patients presenting during the predefined study period were enrolled. The exploratory nature of the study and the limitation regarding statistical power are also now acknowledged. (Page 4, lines 9-14; Page 5, lines 16-21).

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**10. Comment** Lack of a control group; please discuss how this was addressed, including failed conservative treatment, and mention whether any other treatment, especially steroids, was prescribed in addition to ESWT.

**Response:** We revised the Methods and Discussion to make this explicit. The eligibility criteria now state that only patients with chronic insertional Achilles tendinopathy who had failed prior conservative treatment were enrolled, and failed conservative treatment is now defined. We also clarified that no corticosteroid injection or systemic steroid was prescribed during the ESWT treatment period and that participants were advised not to start additional tendon-directed treatment. In the Discussion, we now acknowledge the absence of a control group as the main limitation and explain how repeated within-patient follow-up after failure of prior conservative care was used to partially reduce this limitation (Methods: Page 3, lines 31-30; Page 4, lines 1-8 and 15-29. Discussion: Page 6, lines 24-29; Page 7, lines 16-21).

**11. Comment** The sample size taken does not match the calculated sample size; please check the formula and calculation again and give references.

**Response:** The previous sample-size statement was incorrect for the final repeated-measures quasi-experimental design. We therefore corrected this section and now describe the study accurately as a consecutive, feasibility-based hospital study in which all eligible patients presenting during the study period were enrolled. We also note this in the limitations framing so that the sample is interpreted appropriately as exploratory rather than as a fixed target trial sample (Page 4, lines 9-14; Page 5, lines 16-21).

**12. Comment** Describe the VAS and RMS in short.

**Response:** Short descriptions of both scales were added in the Abstract, Methods, Results, and figure captions (Abstract: Page 2, lines 10-16 and 17-22. Methods: Page 4, lines 25-28. Results: Page 6, lines 1-13. Figures: Page 11, lines 2-6; Page 12, lines 2-4).

**13. Comment** What were the exclusion criteria?

**Response:** A clear exclusion-criteria sentence was added to the Methods. (Page 4, lines 15-24).

**14. Comment** Give the full form of CBC, etc., in line 103.

**Response:** The abbreviations in the investigations section are now written in full at first mention, including complete blood count, C-reactive protein, rheumatoid factor, thyroid-stimulating hormone, and fasting blood sugar (Page 4, lines 16-19).

**15. Comment** Please include a post hoc analysis to show at which 2 time points there was a significant difference and include this information in the text and figures.

**Response:** We added Bonferroni-adjusted post hoc pairwise comparisons to the statistical analysis section and reported the pairwise findings in the Abstract, Results text, and figure captions. For VAS, all pairwise comparisons were reported as significant. For RMS, the 2- versus 3-month comparison was reported as not significant after adjustment (Abstract: Page 2, lines 15-22. Statistical analysis: Page 5, lines 9-15. Results: Page 6, lines 1-13. Figure captions: Page 11, lines 2-6; Page 12, lines 2-4).

**16. Comment** Please reduce redundancy between the figures/tables and text.

**Response:** We tightened the Results section so that the text now emphasizes the main trends and statistical interpretation, while detailed pairwise findings are placed mainly in the captions. Repetitive restatement of figure content was reduced (Page 5, lines 22-30; Page 6, lines 1-13; Page 11, lines 2-6; Page 12, lines 2-4).

**17. Comment** Write the full form of VAS and RMS in Figures 1 and 3.

**Response:** The full forms have been added in the revised figure captions (Page 11, lines 2-4; Page 12, lines 2-4).

**18. Comment** Please avoid using data in the discussion. The discussion needs improvement and should explain causes and implications of the findings.

**Response:** The Discussion was rewritten to follow a more standard structure: principal interpretation, explanation of findings, comparison with prior literature without overloading the section with repeated results, practical implications, strengths, and limitations. We substantially reduced repeated numerical data and added interpretation of possible mechanisms and clinical implications (Page 6, lines 17-31; Page 7, lines 1-29).

**19. Comment** Shorten the conclusion to avoid recommendations.

**Response:** The Conclusion has been shortened to a single interpretive statement and the forward-looking recommendations were removed from that section (Page 8, lines 2-5).

**20. Comment** Six references are over ten years old. Are all of them necessary? Please include recent references.

**Response:** The We retained older references only where they were foundational for epidemiology or early comparative evidence, but we increased emphasis on more recent literature in the Introduction and Discussion and removed the duplicate older reference entry. Recent trials and reviews from 2020-2022 are now more clearly foregrounded (Introduction: Page 3, lines 20-27. Discussion: Page 7, lines 4-9 and 22-29. Reference list: Page 7, lines 23-30; Page 8, lines 1-23).

**21. Comment** Was this a thesis work? If so, please mention this separately at the end.

**Response:** This study was conducted as part of a dissertation submitted in partial fulfillment of the requirements for the degree of FCPS (Physical Medicine & Rehabilitation) (Page 6).