

Dear editor:

Enclosed please find the revised manuscript No. 82615 "Effectiveness of PRP in the treatment of Achilles tendon disease: A Systematic Review and Meta-analysis". We greatly appreciate the comments and have learned a lot from the reviewers. The critics have been addressed as following.

Reviewer Comments:

Reviewer 1:

1. In abstract, 'A comprehensive literature search was conducted in Cochrane, PubMed, Medline, Embase, Cochrane Library, Web of Science, China Biomedical CD-ROM and Chinese scientific and technical journal databases' what is the difference between Cochrane and Cochrane Library? Also PubMed and Medline?

A: We are grateful for your comments. Sorry, it was a mistake; we suppressed Medline and Cochrane, respectively, as it seems redundant. We modified it as follows and written in red in the present manuscript "A comprehensive literature search was conducted in Cochrane Library, Embase, PubMed, Web of Science, China Biomedical CD - ROM, and Chinese Science and Technology Journal databases."

2. In abstract, the period for the systematic search should be mentioned.

A: We appreciate your wonderful comments. Yes, this was our mistake, and we are sorry for that and glad you noticed. as you requested, we modified the as follows and written in red in the present manuscript. "Randomized controlled trials on the effectiveness of PRP injections in treating patients with ATR and AT published between 1 January 1966 to December 2022 were included."

3. In abstract, 'AT at 6 weeks [WMD=1.92, 95% CI (-0.54, 4.38), I2 =34%], March [WMD=0.20, 95% CI (-2.65, 3.05), I2 =60%], and 6 months, what was the intention of the authors from March?

A: We appreciate this helpful remark of yours. As we noticed it was a mistake from us, we directly modified the form as mentioned below and in red font in the manuscript. it was 3 months

"PRP for AT at 6 weeks [WMD=1.92, 95% CI (-0.54, 4.38), I2 =34%], at 3 months [WMD=0.20, 95% CI (-2.65, 3.05), I2 =60%], and 6 months [WMD=2.75, 95% CI (-2.76, 8.26), I2 =87%])"

4. In abstract, 'There was no significant difference between PRP-treated Achilles tendon rupture at 3 months [WMD=-1.49, 95% CI (-5.24, 2.25), I2 =0%], 6 months [WMD=-0.24, 95% CI (-3.80, 3.32), I2 =0%], and 12 months [WMD=-2.02, 95% CI (-5.34, 1.29), I2 =87%] after There was no significant difference in VISA-A scores between the PRP and control groups., this part needs edition.

A: Thanks for your great comment; this was our mistake. We reformulate our original idea and write in red in the manuscript. "There was no significant difference between the PRP and control groups for VISA-A score improvement at 3 months [WMD=-1.49, 95% CI (-5.24, 2.25), I2 =0%], 6 months [WMD=-0.24, 95% CI (-3.80, 3.32), I2 =0%], and 12 months [WMD=-2.02, 95% CI (-5.34, 1.29), I2 =87%] for ATR patients."

5. Also; 'There was no significant difference in Heel lift height between the PRP group and the control group after 6 months [WMD=-3.96, 95% CI (-8.61, 0.69), I² =0%] and 12 months [WMD=-1.66, 95% CI (-11.15, 7.83), I² =0%] of treatment.' needs edition too.

A: Thanks for your great comment; this was our mistake. We reformulate our original idea and write in red in the manuscript. "Additionally, no significant difference was observed between the PRP and the control groups in improving Heel lift height respectively at 6 months [WMD=-3.96, 95% CI (-8.61, 0.69), I² =0%] and 12 months [WMD=-1.66, 95% CI (-11.15, 7.83), I² =0%] for ATR patients."

6. In Study design, the following information should be added: 1) dose the current systematic review and meta-analysis is reported in accordance with the PRISMA (Preferred Reporting Items for Systematic Review and Meta-Analyses) statement?,

2) dose this systematic review is registered with the International Prospective Register of Systematic Reviews (PROSPERO)?

A: we are grateful for all your comment. We added the relevant information below in red font in the manuscript. "In accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) standards, we prepared a prospective protocol outlining our objectives, literature search methods, eligibility criteria, outcome measures, and statistical analyses before initiating the inquiry. The registration number for PROSPERO is CRD42023388903."

7. Does the eligibility criteria for the present systematic review and meta-analysis followed the PICO's question?

A: Thanks for your comments. Yes, our inclusion criteria followed the PICO's questions; we modified them and wrote them in red in the present manuscript. "Only studies that satisfied the following conditions were considered for inclusion: (1) Type of patients: patients with Achilles tendinopathy or Achilles tendon rupture were studied; (2) Type of Intervention: The experimental group was treated with a local PRP injection ; (3) Outcome indicators such as the Victorian Institute of Sports Assessment-Achilles (VISA-A) score, change in Achilles tendon thickness, Visual Analogue Scale (VAS) for pain, patient satisfaction, return to sport, and return), improvement of heel-rise height, ankle flexion, rate of returning to sports activities, and Incidence of adverse events were included. (4) Type studies: randomized controlled trials (RCTs) released to the public between January 1966 and December 2022."

Exclusion criteria: "Trials that did not meet the following criteria were not included in the study: (1) non-randomized studies(In vitro, In vivo, and animals studies); (2) studies that had a follow-up period of shorter than 6 weeks; (3) studies that did not include a control group; (4) studies that involved PRP in combination with other medications; and (5) did not reveal outcomes."

8. In Quality evaluation of the included studies, 'Studies with a total score of 1-3 were considered low-quality, and those with a total score of 4-7 were considered high-quality. Those with a score of ≥ 3 were included in this study.' Needs reference citation and please add the following references: (10.1002/jmv.28325) and (10.1002/jmv.28298) and (10.1093/ptj/pzab144).

A: Thanks for your comments. As requested all the references were added and write in red in the manuscript.

29.Rahmati, Masoud, et al. "The effect of SARS - CoV - 2 infection on cardiac function in post - COVID - 19 survivors: A systematic review and meta - analysis." *Journal of Medical Virology* 95.1 (2023): e28325.

30.Rahmati, Masoud, et al. "The effect of adherence to high - quality dietary pattern on COVID - 19 outcomes: A systematic review and meta - analysis." *Journal of Medical Virology* 95.1 (2023): e28298.

31.Rahmati, Masoud, Julien Gondin, and Fatemeh Malakoutinia. "Effects of neuromuscular electrical stimulation on quadriceps muscle strength and mass in healthy young and older adults: a scoping review." *Physical Therapy* 101.9 (2021): pzab144.

9. In statistical analysis, 'Risk difference (RD) or Odds ratio (OR) were used to describe the data; for measure data (e.g. VISA-A score, VAS score, ankle mobility, etc.) Weighted mean difference (WMD) was used to describe the data. Weighted mean difference (WMD) was used for measures (e.g. VISA-A score, VAS score, ankle mobility, etc.).' this part needs edition. And also please add the following references: (10.1016/j.physio.2021.04.005).

A: we appreciate your wonderful comments. Thanks, we reformulate this part as written below and in red in the present manuscript. "Count data (such as time to return to sport or the occurrence of adverse events) were described using the risk difference (RD) or the odds ratio (OR). All metrics (e.g., VISA-A score, VAS score, ankle mobility, etc.) were expressed as a Weighted mean difference (WMD).As requested, all the references have been added.

32. Rahmati, Masoud, and Fatemeh Malakoutinia. "Aerobic, resistance and combined exercise training for patients with amyotrophic lateral sclerosis: A systematic review and meta-analysis." *Physiotherapy* 113 (2021): 12-28.

We feel that these changes are more persuasive and strongly support our statement in the manuscript. We hope the reviewers agree with our answers and the new version of this manuscript meets the standard of the prestigious **World Journal of Orthopedics**. Thank you very much for your consideration.

Sincerely yours

Author name been removed