Reviewer's report

Title: Different cell extraction procedures do not influence the morphology and gene expression of tenocytes derived from the long head of the biceps tendon

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Reviewer: Guanbin SONG

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Minor Essential Revisions

In this manuscript, Wagenhäuser and colleagues described the influence of the cell isolation methods (CM and ED) on the tenocytes in culture. They compared cell morphology and the tendon-associated genes expression in tendon cells obtained with CM/ED methods, and found that the cell morphology and the gene expression are similar for both isolation techniques. They concluded that viable tendon cells can be obtained from the LBT with both ED and CM. ED method is more feasible for clinical use because of a shorter isolation period and a higher number for obtained cells. In general, it is an interesting study and the manuscript is well written. Nevertheless, there are some issues that the authors should address.

1. In Figure 5, there are seven bands for each gene expression both in ED and CM. What does it mean for each band? Whether they mean seven repetitive samples? If so, why did the gene expressions show distinct difference (e.g. band 6 for Collagen I in ED)? The authors should explain this in Figure Legends and Discussion.

2. In this study, aggrecan expression was detectable in tenocytes isolated by both methods (in Figure 5). The authors stated that it may be resulted from the collagenase I used in ED. In this case, how to explain it in CM group?

3. Why did the authors perform qPCR assay only for collagen I and decorin? How about other involved genes, such as Collagen III, Tenascin-C, Fibronectin and Scleraxis?

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests