CORRESPONDENCE



Response to the Letter to the Editor—Re: A randomized controlled experimental study of the efficacy of platelet-rich plasma and hyaluronic acid for the prevention of adhesion formation in a rat uterine horn model

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Thank you for your interest in our experimental study entitled "A randomized controlled experimental study of the efficacy of platelet-rich plasma and hyaluronic acid for the prevention of adhesion formation in a rat uterine horn model" [1]. We read your comments on the article with great interest.

We preferred to use the term "Round per minute (RPM)" in the materials and methods section of our study. You are right about the technical explanation of RPM and relative centrifugal force (RCF), which is also known as G-force. The RPM of a centrifuge device does not reflect the actual RCF applied to the medium, but it always correlates with the RCF. It is generally complicated to calculate the exact G-force applied to the medium in the centrifuge because there are many more variables than you mentioned in your letter, such as the height of the blood tubes, the volume of the blood in the tube, the hematocrit levels of the samples, the height and maximum angle of the

container bucket. In addition, the same G-force applied to two different blood samples may result in different platelet concentrations, depending on the pre-centrifuge platelet concentration of the blood. In fact, our goal was a $650-700\times10^3~\mu\text{L}$ platelet concentration, and we actually achieved a platelet concentration of $688\times10^3~\mu\text{L}$, similar to the cited study [2]. We followed the same RPMs for the same time periods as the authors. We believe that an important issue in such experimental studies is simplicity as well as the reproducibility of the predefined models. We must maintain the balance between precision and simplicity to ensure the reproducibility of the experiments. And that is the main reason why most articles specify the term RPM instead of RCF.

With our best regards,

Compliance with ethical standards

Conflict of interest The authors declare that they have no competing financial interests.

Ethical statement Ethical approval of the original study was obtained from the Ethics Committee on Animal Experimentation of the Ankara Training and Research Hospital. All applicable international, national, and/or institutional guidelines for the care and use of animals were followed.

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References

- Oz M, Cetinkaya N, Bas S, Korkmaz E, Ozgu E, Terzioglu GS et al. (2016) A randomized controlled experimental study of the efficacy of platelet-rich plasma and hyaluronic acid for the prevention of adhesion formation in a rat uterine horn model. Arch Gynecol Obstet 2016. doi:10.1007/s00404-016-4079-9
- Hesami Z, Jamshidzadeh A, Ayatollahi M, Geramizadeh B, Farshad O, Vahdati A (2014) Effect of platelet-rich plasma on CCl4-induced chronic liver injury in male rats. Int J Hepatol 2014:932930

