AUTHOR'S REPLY

Answer to the Letter to the Editor of Wang H, et al. concerning "Indirect foraminal decompression and improvement in the lumbar alignment after percutaneous cement discoplasty" by Laszlo Kiss et al. (Eur Spine J; 28(6):1441–1447)

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Thank you for the interest in our study. Such commentaries and discussions are very instructive especially in case of a new, minimally invasive, revolutionary technique as percutaneous cement discoplasty is. More researches from different aspects and growing body of scientific evidence would be required in case of all new (and recent) spine surgical implants and methods.

There are several techniques in the literature for the measurement of global and segmental spinal radiographic parameters. In our measurement protocol, the L1–L5 lumbar lordosis is not the sum of the four segmental lordosis values because segmental values were measured in the intervertebral disc space while in global lordosis the geometries of the five vertebrae have been also included. The statistical significance of the change of a parameter also depends on the sample size and the magnitude of change what was really different in our study comparing the mentioned parameters. For example, the LL changed from 35.5° to 38.9° what is a only 9.5% increase, while the mean sL increased from 4.4° to 6.6° what is a 73.6% change.

The second concern of the letter highlights a real deficiency of the manuscript, even though the statistical analysis was correct at the time of its implementation. In case of the spinopelvic radiological parameters, one-way repeated measures ANOVA and nonparametric Friedman tests were conducted first. After that, the concerning post hoc tests (Bonferroni post hoc test of ANOVA and Wilcoxon signed-rank test for Friedman test) were performed with Bonferroni adjustment for the multiple comparison. During the very meticulous review process, we had to change the manuscript and the tables several times and the description of the post hoc tests has been accidentally removed from the final text. We also agree that from the mathematical point-of-view the non-normally distributed data should be interpreted as median and interquartile ranges. In our paper, these data are presented as mean and standard deviation for the better lucidity and comparability.

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