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Letter to the Editor
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Response to: A Randomized Control Trial Comparing Local Autografts and Allografts in Single Level Anterior Cervical Discectomy and Fusion Using a Stand-Alone Cage

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Dear Editor,

We thank the concerned reader for raising pertinent questions regarding our article, "A randomized control trial comparing local autografts and allografts in single level anterior cervical discectomy and fusion using a stand-alone cage" published earlier in the Asian Spine Journal [1].

The first question concerns the sample size. The study was a randomized controlled study from a single surgeon series. The sample size calculation was done based on the expected difference in mean numerical pain rating scale and disc height among the two study groups at 12 months postoperative period [2]. We assumed that there would be one standard deviation difference in the mean Numerical Rating Scale between allograft and local graft groups, power of 80% and alpha of 0.05. Based on this, the required sample size came out to be 15 in each of the two groups, i.e., a total sample size of 30. Since there were no non-unions in any of the study patients in both the groups, a larger study population, though desirable, is unlikely to affect the results statistically.

For the query regarding the distribution of patients based on the diagnosis, it was similar in both the groups (three myelopathy, 10 radiculopathies in the allograft group, and three myelopathy and 11 radiculopathies in local graft). We did not observe differences in outcomes between the two groups based on the diagnosis.

Regarding the adequacy of local bone graft, we have been using local autografts in all patient groups and did not observe a deficiency of local bone in any of the patients, irrespective of the presence or absence of hypertrophied osteophytes. The anteroinferior lip of the proximal vertebra and the posterior lips of both vertebrae are standardly removed as part of the discectomy-decompression. This bone is usually sufficient to fill the cage. Hence, we planned to describe the usefulness by employing a high-powered randomized study.

Since it was a 12-month follow-up randomized controlled trial study with a requirement for periodic assessments, we excluded patients with significant comorbidities falling under the American Society of Anesthesiologists grade >3.

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Conflict of Interest

No potential conflict of interest relevant to this article was reported.

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