

## Reply to “Letter to the Editor Concerning ‘Clinical Outcomes of Condoliase Injection Therapy for Lateral Lumbar Disc Herniation’ by Kagami et al.”

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To the Editor:

We value the insightful comments provided by the authors of the letter in reference to our article titled “Clinical Outcomes of Condoliase Injection Therapy for Lateral Lumbar Disc Herniation”<sup>1)</sup>. We express our gratitude for taking the time to review our paper and allowing us the opportunity to address the comments.

First, we regret that we were unable to precisely quantify the area of the protruding nucleus pulposus. The cited literature compares the area ratio of the herniation to the spinal canal area<sup>2)</sup>, but as lateral lumbar disk hernias (LLDHs) extend beyond the spinal canal, this method was deemed inapplicable. In this study, we defined hernia reduction as an assessment by two evaluators, concurring that it was half the size of the hernia before the condoliase injection therapy (CIT) procedure.

With regard to the timing of symptom reduction, Visual Analogue Scale (VAS) scores for LLDH were reduced from the early stages of CIT. Despite measuring VAS scores 1-3 months post-procedure, many LLDH patients experienced pain resolution within the first month after CIT. Direct compression of the dorsal radial ganglion by LLDH implies that a change in its position significantly reduces pain. The timing of symptom reduction and associated imaging findings, such as MRI results, are intriguing points that we continue to investigate.

Lastly, the injection position of condoliase holds significance in clinical practice. Given previous studies indicating the effectiveness of the injection tip at the center of the disk, we consistently performed the procedure from the LLDH

side in all our cases<sup>3)</sup>. The study’s limitation lies in the uncertainty of the effect of the injection position on clinical efficacy. However, the concept of inserting the injection tip slightly outside the LLDH may prove valuable and merits exploration in our future work.

We extend our gratitude once again to the authors of this letter for their interest in CIT for LLDH. We trust that our responses adequately address their queries and those of other esteemed readers of this journal.

**Conflicts of Interest:** The authors declare that there are no relevant conflicts of interest.

### References

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