Letter to the Editor

Is it a must to perform discography on patients with highly suspect discogenic low back pain?

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Thanks for Dr. Min Cheol Chang's interest in our study. We are delighted to join the discussion of targeting sinuvertebral nerve for discogenic low back pain (DLBP). We would like to share more of our clinical experience and try our best to answer his questions and concerns (1).

Firstly, patients whose clinical symptoms were exactly matched at DLBP and had evidence of disc degeneration on magnetic resonance imaging (MRI) would be tentatively diagnosed as highly suspected DLBP. MRI may not be able to accurately diagnose DLBP, but so far there is still not any highly effective method to diagnose DLBP. Therefore, we selected MRI, which is a non-invasive method to diagnosis DLBP. Although discography is considered as the gold standard for the diagnosis of d DLBP, Carragee *et al.* (2). found that the diagnostic accuracy of discography was only 50–60% through a prospective study. Meanwhile, discography is strongly not recommended via Roger Chou's study in diagnosing DLBP (3). Otherwise, discography is an invasive diagnostic test. At least one normal adjacent segment intervertebral disc may be injured as control during pain provocation test. Sinuvertebral nerve blocks (SVNB) with local anaesthetics is also a possible alternative to provocation discography (4). To put patient's interest first, a careful consultation was performed to each highly suspected DLBP patient whether they were willing to receive SVNB and a shared decision was made. Therefore, we reported our cases as a retrospective observational cohort since the lack of discography for diagnosis is indeed the problem we failed to solve in practical work. A blur on terminology that we called patients with DLBP may be inappropriate. All the patients we included may be defined as highly suspected DLBP. We apologize for the unclear definition of DLBP.

Secondly, SVNB was for supportively diagnostic purpose at first place with a dose of 0.3 mL, 0.66% lidocaine solution. The dosage and concentration of lidocaine we set, which Dr. Chang considers may be too little, were based on our previous clinical experience that a relative large quantity of drug liquor may cause wide diffusion leading to epidural anesthesia. Also, lidocaine has comparable effectiveness at the concentration of either 0.6%, 0.8% or 1.0%. It is safer to use lower concentration of lidocaine on local anesthetic (5). Therefore, we chose the 0.66% solution. We waited until the effect of lidocaine disappeared within a few days after SVNB but the effect actually lasts much longer than we expected. Most of the patients who got pain relief after SVNB were satisfied, had no intention for further treatment immediately and agreed follow-up observation. Our report declaimed SVNB's therapeutic effect via our observation.

Finally, we did not set placebo in this study. This was a pilot study for tentative exploration into the usage of SVNB for DLBP. We intend to set up a prospective cohort with placebo in the future and hope to improve our therapeutic regimen.

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Footnote

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Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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