Response to Comments on "Correlation between Radiologic Sign of Lumbar Lordosis and Functional Status in Patients with Chronic Mechanical Low Back Pain"

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Dear Editor,

We appreciate the interest in our work and for the opportunity to focus on detailed aspects of chronic mechanical low back pain. The reader attempted to emphasize the importance of pelvic incidence as a predictive factor for chronic low back pain. We should mention that concordant with this valuable comment there are several studies considering sagittal imbalance as a potential contributing factor for developing low back pain [1-3]. Pelvic incidence, a pelvic anatomic parameter that is specific and constant for each person determines the size of lumbar lordosis. Changes in this parameter either through relation with back muscle degeneration or other spine conditions might play a role in chronic mechanical low back pain [2-4].

The main focus of our study was lumbar lordosis and its effect on functional status measured by Oswestry disability index (ODI) that is not a simple pain score. According to this index, no significant correlation between the degree of lumbar lordosis and the score of functional disability was found [5]. Also, in a recent study using ODI, osteoarthritis of the facet joints as specific locations of degenerative changes to the lumbar spine, was not definitely correlated with ODI scores [6]. On the other hand, 2 studies investigating the relationship between spinopelvic parameters and clinical symptoms of severe isthmic spondylolisthesis used ODI and found a significant correlation between degree of lumbar lordosis and the Oswestry score. However, there was no correlation between pelvic incidence and the Oswestry score [7,8].

Disability is the main consequence of low back pain that should be prevented or treated once occurred. Thus, for more clarification we suggest randomized trials to evaluate possible relationships between the various spinopelvic alignment parameters such as pelvic incidence and the level of functional disability in patients with chronic mechanical low back pain.

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Conflict of Interest

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

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