통증 및 근골격재활

게시일시 및 장소: 10월 18일(금) 08:30-12:20 Room G(3F)

질의응답 일시 및 장소: 10월 18일(금) 10:00-10:45 Room G(3F)

## P 1-94

## Outcome of IA Lumbar Facet Joint Corticosteroid Injection According to the Severity of FJ arthritis

Dong Gyu Kwak<sup>1\*†</sup>, Sang Gyu Kwak<sup>1†</sup>, Ah Young Lee<sup>1†</sup>, Min Cheol Chang<sup>1†</sup>

College of Medicine, Yeungnam University, Department of Rehabilitation Medicine<sup>1</sup>, College of Medicine, Catholic University of Daegu, Department of Medical Statistics<sup>2</sup>, College of Rehabilitation Sciences, Deagu University, Department of Physical Therapy<sup>3</sup>

Lumbar facet joint osteoarthritis (FJOA) due to degenerative change(s) is known to be the main cause of facet joint-origin low back pain (LBP). Intra-articular lumbar facet joint (IA LFJ) corticosteroid injection is currently widely used for controlling pain induced by FJOA. We evaluated outcomes of IA LFJ corticosteroid injection according to the severity of FJOA. Fifty patients who received IA LFJ corticosteroid injection for the treatment of LFJ pain were recruited. Patients were classified into three groups according to the severity of FJOA revealed on lumbar axial magnetic resonance imaging (MRI). Ten patients were assigned to group A (mild FJOA), 27 to group B (moderate FJOA), and 13 to group C (severe FJOA). Pain intensity was evaluated using a numerical rating scale (NRS) before treatment, and at 1, 2, and 3 months after treatment. Twenty-six of 50 (52%) patients experienced a successful treatment outcome (> 50% reduction in NRS score at 3 months). Patients in all groups demonstrated a significant decrease in NRS scores at 1, 2, and 3 months after IA LFJ corticosteroid injection (p < 0.001). However, the effect of IA LFJ corticosteroid injection was not significantly different among the three groups (p = 0.889). Facet joint-origin LBP was significantly reduced after IA LFJ corticosteroid injection, regardless of the severity of FJOA. Results of this study suggest that IA LFJ corticosteroid injection can be a beneficial clinical option for managing LBP caused by FJOA

Acknowledgment: None

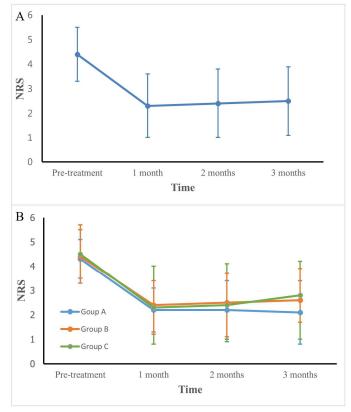


Fig. 1 Grading of facet joint osteoarthritis (FJOA) in representative T2-weighted axial magnetic resonance images of the lumbar spine: (A) group A, narrowing of the lumbar facet joint space and the presence of a small osteophyte; (B) group B, narrowing of the joint space, moderate osteophytes, and/or subchondral erosions; and (C) group C, narrowing of the joint space, large osteophytes, and subchondral erosion/cysts are apparent.

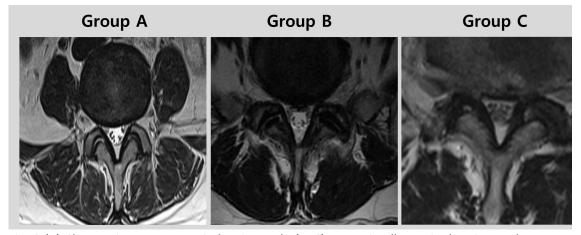


Fig. 2 (A) Changes in mean numerical rating scale (NRS) scores in all recruited patients. The mean NRS scores at 1, 2, and 3 months after intra-articular lumbar facet joint corticosteroid injection were significantly decreased compared with pretreatment values. (B) Changes in mean NRS in each group. In all three groups, the mean NRS scores from pre-treatment to each evaluation time point were significantly more reduced. However, the changes in the mean NRS scores over time for each group were not significantly different among the 3 groups.

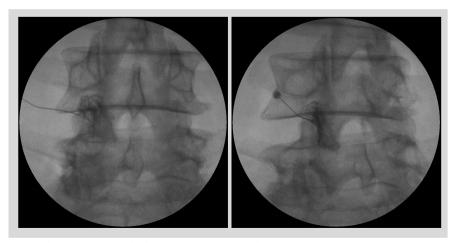


Fig. 3 Fluoroscopy-guided IA LFJ corticosteroid injection