

통증 및 근골격재활

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

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

P 1-110

Clinical ability of contrast-enhanced MRI to predict treatment outcomes for lumbar facet joint pain

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Objective

Several radiologic imaging techniques have been used to predict the effects of treatment on lumbar facet joint (LFJ) pain. However, there are no reports on the use of contrast-enhanced magnetic resonance imaging (MRI) in the management of LFJ pain. In the current study, we aimed to evaluate the clinical ability of contrast-enhanced MRI using gadolinium to predict treatment outcomes for LFJ pain.

Methods

A total of 26 patients with LFJ pain were recruited and intraarticular corticosteroid injections were performed to each patient. The treatment outcomes were assessed using a numerical rating scale (NRS), and the enhancement of the LFJ and the grading for osteoarthritis were investigated independently by two radiologists.

Results

Intraarticular corticosteroid injections were administered to 26 patients (12 women and 14 men; mean age: 65.19±11.05 years) with LFJ pain. Among the 26 patients, 16 patients were included in the enhanced group, and the remaining 10 patients were included in the non-enhanced group, based on contrast-enhanced MRI scans using gadolinium. In both the enhanced and non-enhanced groups, NRS scores significantly decreased at 1, 2, and 3 months after treatment ($p < 0.05$). However, we saw no significant difference between the groups from pretreatment to three months after treatment ($p > 0.05$).

Conclusions

The routine use of contrast-enhanced MRI using gadolinium is not recommended in patients with LFJ pain.

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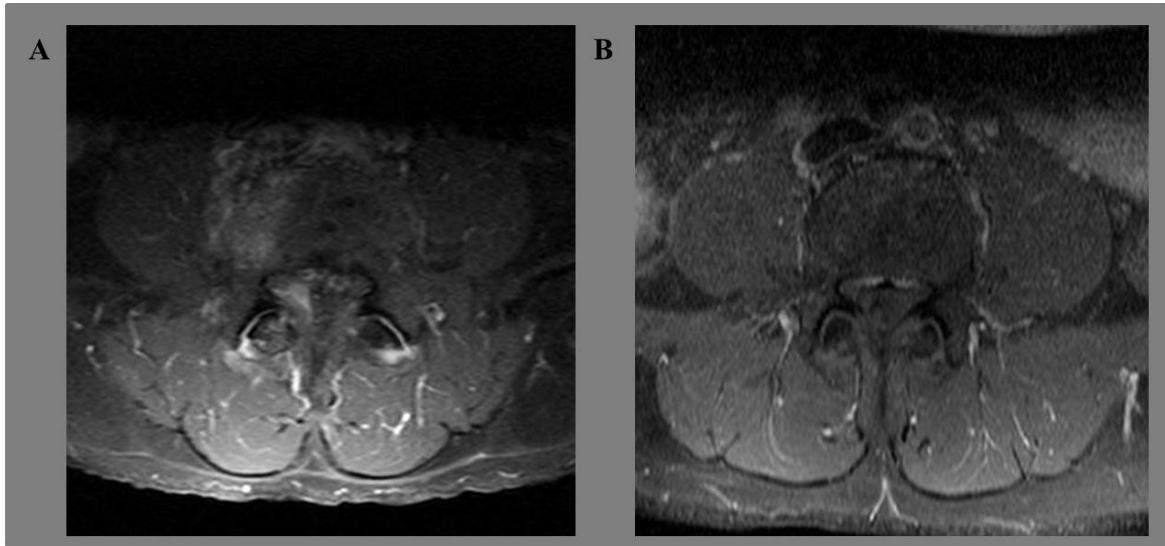


Figure 1. Enhancement and non-enhancement of the lumbar facet joint in axial contrast-enhanced T1 magnetic resonance imaging. (A) Enhanced lumbar facet joint (B) Non-enhanced lumbar facet joint

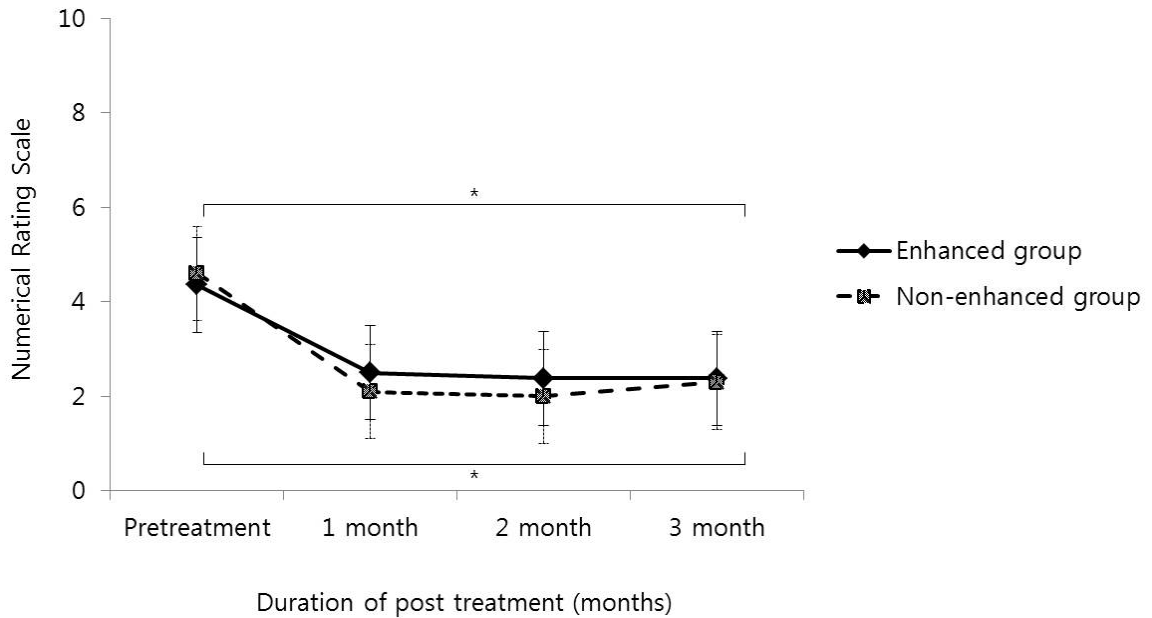


Figure 2. Comparative results of numerical rating scale of lumbar facet joint pain in enhanced and non-enhanced groups. * $p < 0.05$