Rheumatoid arthritis case series

Standard treatment protocols for lumbar degenerative lesions in the setting of rheumatoid arthritis (RA) are lacking. The purpose of a study of Akbary et al., from St. Mary's Hospital, was to evaluate the clinical and radiologic outcomes of minimally invasive oblique lumbar interbody fusion (MI-OLIF) in RA patients having degenerative lumbar spine lesions.

This was a retrospective hospital-based case series (evidence level 4). Eight patients with degenerative lumbar disease with significant back pain and neurologic claudication underwent MI-OLIF with polyetheretherketone cage insertion and posterior pedicle screw instrumentation. The clinical outcomes were measured by the numerical rating scale (NRS) for back and leg pain and the Oswestry Disability Index (ODI), and radiologic outcomes were studied on radiographs, computed tomography, and magnetic resonance imaging. Minimum follow-up duration was 1 year.

Mean NRS results for back and leg pain preoperatively were 6.3 and 7.1 that improved to 2.6 and 2 for back and leg pain, respectively, at last follow-up. The mean ODI scores preoperatively were 58.02 that improved to 39.06 at last follow-up. All patients had good functional outcomes, good fusion rates, and were able to continue their activities of daily living without much disability at last follow-up.

MI-OLIF in patients with symptomatic lumbar spine degenerative lesions with RA seems to provide good short-term clinical and radiologic outcomes [1)].

Patients hospitalized in the Osaka Rosai Hospital for acute ischemic cerebrovascular disease from August 2002 to February 2018 were divided into two groups at February 2010.

Hashimoto et al., retrospectively identified patients with rheumatoid arthritis (RA). The incidence of RA, occurrence of acute exacerbation of inflammation due to causes other than synovitis preceding ischemic cerebrovascular disease (iCVD) (non-synovitis AEI), and serum C reactive protein (CRP) were compared.

In the first and second periods, 23/1203 patients (1.9%) and 22/1094 patients (2.0%) with acute iCVD had RA, respectively. Non-synovitis AEI was significantly less frequent in the second period (5%, n=1) than the first period (35%, n=8) ($p < 0.05$). CRP was significantly lower at iCVD onset in the second period (median and interquartile range: 2.72 [0.89-4.5] vs. 0.34 [0.12-1.19 mg/dl], $p<0.01$). Excluding 9 patients with non-synovitis AEI, CRP was still lower in the second period (1.21 [0.47-2.72] vs. 0.33 [0.11-0.98 mg/dl], $p < 0.01$). CRP levels before both iCVD and non-synovitis AEI tended to be lower in the second period (1.53 [0.3-2.78] vs. 0.69 [0.06-1.28 mg/dl], $p=0.059$). Two patients using tocilizumab developed iCVD despite persistently low CRP levels.

With progress in treatment, RA-related inflammation was better suppressed and CRP decreased, but the prevalence of RA among acute iCVD patients was unchanged. Strategies for tighter control of inflammation are needed, and a new biomarker may be required in patients using tocilizumab [2)].

A total of 201 patients with RA who had been followed up at the outpatient clinic of the authors' institution were enrolled in this study. retro-odontoid soft-tissue (ROST) thickness was evaluated on midsagittal T1-weighted MRI. The correlations between ROST thickness and radiographic findings or

clinical data on RA were examined. The independent factors related to ROST thickness were analyzed using stepwise multiple regression analysis.

The average thickness of ROST was 3.0 ± 1.4 mm. ROST thickness showed an inverse correlation with disease duration ($r = -0.329$, $p < 0.01$), Steinbrocker stage ($r = -0.284$, $p < 0.01$), the atlantodental interval (ADI) in the neutral position ($r = -0.326$, $p < 0.01$), the ADI in the flexion position ($r = -0.383$, $p < 0.01$), and the ADI in the extension position ($r = -0.240$, $p < 0.01$). On stepwise multiple regression analysis, ADI in the flexion position and Steinbrocker stage were independent factors associated with ROST thickness.

Although the correlations were not strong, ROST thickness in patients with RA was inversely correlated with ADI and Steinbrocker stage. In other words, ROST thickness tends to be smaller as atlantoaxial instability and peripheral joint destruction worsen. Clinical trial registration no.: UMIN000000980 (UMIN Clinical Trials Registry) [3].

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2)
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3)
Dohzono S, Suzuki A, Koike T, Takahashi S, Yamada K, Yasuda H, Nakamura H. Factors associated with retro-odontoid soft-tissue thickness in rheumatoid arthritis. J Neurosurg Spine. 2016 Nov;25(5):580-585. Epub 2016 Jun 24. PubMed PMID: 27341058.