

Commentary

Ankylosing spondylitis (AS) belongs to a group of inter-related diseases termed spondyloarthropathies, which comprise reactive arthritis, arthritis/spondylitis with inflammatory bowel disease, and arthritis/spondylitis with psoriasis, and also undifferentiated spondyloarthritis. Inflammatory back pain (IBP) is the leading symptom in patients with AS. Recently, Assessment of Spondyloarthritis international Society (ASAS) developed a new IBP criteria.^[1] The criteria consists of five parameters; insidious onset, Pain at night, Age onset <40 years, Improvement with exercise, and No improvement with rest. Recently, a mnemonic by using the first letters of the criteria items (iPAIN; inflammatory PAIN) has been published.^[2]

The IBP reflects the inflammation of sacroiliac joints, spine, and spinal entheses. The inflammation of spine characterized by ossification of the ligaments leads to progressive rigidity and altered biomechanical properties of the spine. Inflammation at the vertebral corners leads to the formation of syndesmophytes that span the ossified nucleus pulposus at each intervertebral disc level. These structural changes at the spine may cause neurological complications like solitary nerve root lesions, myelopathy, and spinal cord injury caused by cauda equina syndrome. Spinal cord lesions in patients with AS rarely occur and may be the result of traumatic fractures of vertebrae, epidural hematoma associated with fracture, discovertebral destruction, ossification of the vertebral ligaments like posterior longitudinal ligament and ligamentum flavum.^[3] There are no data reporting the prevalence of ossification of ligamentum flavum (OLF) in patients with AS; however, 15.5% prevalence of ossification of posterior longitudinal ligament (OPLL) has been reported in patients with AS.^[4] Thoracic OLF is the main cause of thoracic myelopathy and the most common symptoms are motor dysfunction and sensory deficits in the lower extremities; pain, numbness, and claudication can be observed in some patients.^[5] Myelopathy caused

by the ossification of vertebral ligaments in AS published in this issue of the journal by Jagtap *et al.*,^[6] has a special importance in this era of biologics which are now increasingly used in the treatment of AS. A coincidental occurrence of AS and multiple sclerosis (MS) may be plausible.^[7] Moreover, tumor necrosis factor alpha antagonists which are important and most efficacious biologic agents in the treatment of AS may also cause MS. Multiple sclerosis may have similar signs and symptoms with these patients who had myelopathy.^[8] Differential diagnosis of the motor dysfunction and sensory deficit of the patients with AS should include ossification of the vertebral ligaments. Clinicians should be familiar to the clinical and imaging findings of myelopathy caused by OPLL or OLF. This will ease the early diagnosis and treatment of this serious condition and prevent unnecessary diagnostic procedures and premature drug cessation in patients with AS.

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References

1. Sieper J, van der Heijde D, Landewe R, Brandt J, Burgos-Vargas R, Collantes-Estevez E, *et al.* New criteria for inflammatory back pain in patients with chronic back pain: A real patient exercise by experts from the Assessment of SpondyloArthritis international Society (ASAS). *Ann Rheum Dis* 2009;68:784-8.
2. Ozgocmen S, Akgul O, Khan MA. Mnemonic for assessment of the spondyloarthritis international society criteria. *J Rheumatol* 2010;37:1978.
3. Ramos-Remus C, Russell AS, Gomez-Vargas A, Hernandez-Chavez A, Maksymowych WP, Gamez-Nava JI, *et al.* Ossification of the posterior longitudinal ligament in three geographically and genetically different populations of ankylosing spondylitis and other spondyloarthropathies. *Ann Rheum Dis* 1998;57:429-33.

4. Ramos-Remus C, Gomez-Vargas A, Guzman-Guzman JL, Jimenez-Gil F, Gamez-Nava JI, Gonzalez-Lopez L, *et al.* Frequency of atlantoaxial subluxation and neurologic involvement in patients with ankylosing spondylitis. *J Rheumatol* 1995;22:2120-5.
5. Kang KC, Lee CS, Shin SK, Park SJ, Chung CH, Chung SS. Ossification of the ligamentum flavum of the thoracic spine in the Korean population. *J Neurosurg Spine* 2011;14:513-9.
6. Jagtap SA, Harsha JK, Patil AS, Nadir MD. Ossified Ligamentum flavum causing compressive myelopathy in ankylosing spondylitis. *J Neurosci Rural Pract.* 2013;4:230-2.
7. Calin A. Is there an association between ankylosing spondylitis and multiple sclerosis? *Ann Rheum Dis* 1989;48:971-2.
8. Pfueller CF, Seipelt E, Zipp F, Paul F. Multiple sclerosis following

etanercept treatment for ankylosing spondylitis. *Scand J Rheumatol* 2008;37:397-9.

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