

COMMENTARY

Commentary on article 169_15, Masato Tomii, Junichi Mizuno, Kazuo Watanabe, *Asian J Neurosurg* 2016 (3);273-275.

Comments for radiological study of C3–C4 level surgical cases of cervical spondylosis

In this manuscript, Tomii *et al.*, investigate the radiological parameters of C3–C4 level in cervical spondylotic myelopathy patients. They have compared two groups: One with anterior cervical discectomy and fusion (ACDF) surgery for C3–C4 level and the other with C5–C6 level. They have found that C3–C4 level patients to have more diffuse spondylotic changes than C5–C6 patients.

I thank the authors for giving attention to an important issue of cervical spondylotic disease.

The motion characteristics of the cervical spine are quite different with aging and degeneration.^[1] A global kyphosis or S-type deformity are compensated by C3–C4 and C5–C6 level hypermobility or static compression. The instantaneous center of rotation for the cervical spine is considered to be at C5–C6 level and it increases rostrally by aging.^[2] The results of this study are well correlated with this phenomenon.

The authors conclude that “the aging process develops from lower cervical to upper cervical level, and this static factor in conjunction with dynamic factor (instability) was the causative factors for the CSM in C3–C4 ACDF patients.” They, however, have neither looked for the instability in each group, nor they have looked for the severity of the disease.

I believe that further studies investigating the outcomes and hypermobility of C3–C4 related cervical spondylosis may be interesting to outline better management options and outcomes of this subset of patients with cervical spondylotic myelopathy.

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