

Commentary on: “Symptomatic Triple-Region Spinal Stenosis Treated with Simultaneous Surgery: Case Report and Review of the Literature”

Kenneth M. C. Cheung¹

¹Department of Orthopaedics and Traumatology, The University of Hong Kong, Pokfulam, Hong Kong, SAR, China

Global Spine J 2015;5:522.

Address for correspondence Kenneth M. C. Cheung, MBBS, MD, Department of Orthopaedics and Traumatology, The University of Hong Kong, 102 Pokfulam Road, Pokfulam, Hong Kong, SAR, China (e-mail: cheungmc@hku.hk).

Spinal stenosis is a problem that spine surgeons deal with commonly, and yet, as the authors pointed out, it is uncommon for patients to present with more than one symptomatic region. When they do, the stenosis tends to occur in the cervical and lumbar region. This would be related to the higher incidence of degenerative changes in the cervical and lumbar spine.¹

Clinical symptomatology and signs are most important to help us suspect and differentiate between single-region versus multiregional involvement. For example, in patients presenting with numbness and spasticity in all four limbs but disproportionately severe lower limb symptoms and signs, then tandem cervical and thoracic compressions should be suspected, and a thoracic magnetic resonance imaging should be obtained.

Concomitant lumbar and thoracic/cervical stenosis is more difficult to diagnose clinically because it likely includes a mixture of signs. Because of the lumbar compression, the upper motor neuron signs in the lower limbs are likely abated. In such situations, the history maybe more useful if the patient complains of sciatic pain or lower limb claudication. However, it should be borne in mind that if the myelopathy is severe, the patient may not be able to walk sufficiently long distances to lead to claudication.

The nature of the pathology may provide clues to the need to screen the spine for additional lesions. In patients with ossified yellow ligament presenting in one region of the spine, it is our practice to screen the other regions, because of the incidence of asymptomatic but critical stenosis in other parts of the spine.²

On the other hand, we know that degenerative changes in the lumbar spine are common as we age and that >90% of the population above the age of 50 will have some degree of lumbar degeneration.³ Thus it is certainly possible that the findings are incidental and not a cause of symptoms.

Thus, clinical judgment taking into account clinical exam findings and radiologic findings is key. Patients should not be treated based on only radiologic findings of stenosis. The treatment plan will need to be individualized based on the patient’s fitness as well as the nature of the pathology in each region. If the patient is unfit for prolonged surgery, then staged surgery should be performed. In this particular case report, it could be argued that anterior decompression for the cervical lesion could achieve the same result without the need for a long posterior fusion, and if so, it may be better to stage the surgery. Staging also has the advantage of observing the patient postsurgery, and if there is significant recovery, the need for surgery to the other regions may be avoided.

Overall, managing such patients requires care in clinical judgment and taking into account the patient’s general condition and fitness for concomitant multiple procedures. Generalized recommendations cannot and should not be made. The authors and editors are to be congratulated for highlighting this case for discussion.

References

- 1 Dagi TF, Tarkington MA, Leech JJ. Tandem lumbar and cervical spinal stenosis. Natural history, prognostic indices, and results after surgical decompression. *J Neurosurg* 1987;66(6):842–849
- 2 Guo JJ, Luk KD, Karppinen J, Yang H, Cheung KM. Prevalence, distribution, and morphology of ossification of the ligamentum flavum: a population study of one thousand seven hundred thirty-six magnetic resonance imaging scans. *Spine (Phila Pa 1976)* 2010; 35(1):51–56
- 3 Cheung KM, Karppinen J, Chan D, et al. Prevalence and pattern of lumbar magnetic resonance imaging changes in a population study of one thousand forty-three individuals. *Spine (Phila Pa 1976)* 2009;34(9):934–940

received
May 29, 2015
accepted
July 23, 2015

DOI <http://dx.doi.org/10.1055/s-0035-1566289>.
ISSN 2192-5682.

© 2015 Georg Thieme Verlag KG
Stuttgart · New York

License terms

