



Editorial



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See the article “Vertebral Body Sliding
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Rigid Kyphosis” via <https://doi.org/10.14245/ns.2040482.241>.



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Review of Vertebral Body Sliding Osteotomy for Cervical Myelopathy with Rigid Kyphosis

In this paper, Dr. Dong Ho Lee¹ describes the use of the vertebral body sliding osteotomy (VBSO) technique for the treatment of cervical spondylotic myelopathy with kyphosis. He had previously described it as an alternative to corpectomy or posterior decompression to treat patients with ossification of the posterior longitudinal ligament (OPLL) causing cord compression. Dr. Lee has deservedly achieved international renown for this technique and VBSO is becoming established as a viable alternative to the standard procedures for decompressing the cervical spine. He now expands the indications for VBSO to include a much more prevalent condition, spondylotic myelopathy.

There are distinct advantages to VBSO for OPLL. Posterior decompressions such as laminoplasty or laminectomy and fusion are indirect decompressions that tend to work better in patients with lordosis or flexible kyphosis without severe anterior cord compression. Anterior corpectomy can be technically challenging and the dura can be ossified, increasing the risk of dural tears. The only way to avoid dural tears with anterior corpectomy is to leave the ossified dura intact as a floating island, but the remaining bone often still puckers into the dura, incompletely decompressing the cord. In contrast, VBSO is a direct decompression that translates the entire ossified mass along with the vertebral body anteriorly without risking a dural tear. As such, it represents an innovative alternative with distinct advantages over the existing techniques for many patients with OPLL.

Dr. Lee illustrates the VBSO procedure in 2 patients with cervical kyphosis with cord compression. The 2 cases demonstrate the ability of this technique to thoroughly decompress patients with cord compression and also to correct their kyphosis. Although the title depicts the use of the technique for patients with rigid kyphosis, I would tend to describe both of these patients as having semirigid kyphosis, since they do not have ankylosed spines. Both cases did well with good outcomes, suggesting that the VBSO is a reasonable alternative to established techniques for patients with kyphosis and spondylotic myelopathy.

Surgeons now have a novel alternative method for treating patients with cervical spondylotic myelopathy. For those who are not comfortable with the VBSO, there are well-established alternatives. For the 1st case that was treated circumferentially, one could have done combinations of corpectomies and anterior cervical corpectomy and fusions (ACCFs) anteriorly or just ACDFs, followed by posterior decompression and fusion. For the second case (Fig. 2), an alternative could have been a C4 corpectomy with C5–6 ACDF. Alternatively, some would have treated both patients with a posterior decompression and fusion.

Finally, it remains to be determined if, in a large series, VBSO results in outcomes equivalent to more established techniques such as corpectomy or posterior decompression and fusion for patients with cervical spondylotic myelopathy. Given that VBSO, in theory, should

be able to decompress the cord as well as the more established techniques, it seems reasonable that it would result in comparable outcomes. However, even with equivalent outcomes, in most surgeons' hands, it may still prove to be a more challenging procedure than corpectomy or posterior decompression and fusion. With numerous different procedures that can result in good surgical outcomes, how does one choose amongst the various techniques? The optimum procedure for any surgeon is the one

that they are most comfortable with and that works best in their hands with the least likelihood of complications.

REFERENCE

1. Lee DH, Park S, Lee WS, et al. Vertebral body sliding osteotomy for cervical myelopathy with rigid kyphosis. *Neurospine* 2020;17;640-7.



Title: science and charity
Artist: Pablo Picasso
Year: 1897
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