Clinico-biomechanical considerations on oblique corpectomy. Response to: Multilevel oblique corpectomy for cervical spondylotic myelopathy preserves segmental motion (by A.G. Chacko et al.)

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We read with interest the article by Chacko et al. [1] “Multilevel oblique corpectomy for cervical spondylotic myelopathy preserves segmental motion”; the authors are to be congratulated for their series shown in the article. Certainly, oblique corpectomy described and divulged by George [2] may be an alternative for decompression without fusion in ankylosed spines. It allows for full anterior foraminotomy with direct proximal root control, as well as central canal decompression in patients suffering from stenotic myelopathy. Some complications have been described as Horner’s syndrome, mostly transient. This procedure is interesting for patients that are not candidates for posterior decompressive procedures because of non-lordotic alignment and in whom instability is discarded with preoperative flexion–extension X-rays and not expected because of the degenerated discs and less bone removal, not needing additional instrumentation. This technique requires a learning curve and good patients’ selection, as well as vertebral artery control without remarkable reported vascular complications. We would like to discuss a couple of points.

Cervicoarthrosis—the cause of stenotic myelopathy—may be silent, but when it “wakes up” most of the times shows as neck pain. On the other hand, patients treated with anterior decompressive and reconstructive procedures have less postoperative residual axial neck pain than after posterior procedures. According to some other groups which do

not restrict the technique to kyphotic alignment, some patients may develop new axial pain (as well as kyphosis) [3], though most of patients with preoperative neck pain improved on pain and most of those without it stayed the same, though few in the latter group worsened a little bit [4]. The goal of surgery is improvement of neurological compromise and decrease in pain, not keeping motion; the need for pain-killers is neither assessed pre and postoperatively nor compared with standard anterior corpectomy and fusion (ACF), so we suggest that in the future it could be investigated whether there is any difference, in patients treated with this technique in comparison with the standard.

Another concern is on the biomechanical consequences on the long term. Osteophytes are thought to be the attempt of the body trying to immobilize the unstable and painful segment. The biomechanical study for this surgical technique used non-collapsed disc specimens [5] and quantified the destabilizing effect of it, though kinematics is altered considerably less than that for standard corpectomy (even after plating). Given the kyphosing effect of this technique in the mentioned young population (1:3) with relatively healthy non-collapsed discs and thus mobile function kept, concern raises about what the future holds for these segments; motion preservation may be important specially in young patients, but it should not compromise future neurological function.

Conflict of interest None.

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