Road To Minimally Invasive Cervical Laminoplasty

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Laminectomy for cervical spine is a very classic technique for most of the spine diseases. This technique has a long-standing history, and still stays as the main procedure. However, laminectomy is known to have fatal complications such as delayed kyphosis with progressive neurological deterioration, postoperative hematoma or prolonged wound pain due to muscle atrophy. To avoid these complications, laminoplasty for the cervical lesions has been introduced in our country in 1980s. This technique is getting popularity as a surgical procedure for multi-level cervical spondylosis and ossification of the posterior longitudinal ligament (OPLL), so-called a Japanese disease. There are 2 important points in cervical operation, and they are decompression of the neural tissues and correction of the cervical alignment. Laminoplasty can achieve excellent decompression as good as laminectomy with relatively good maintenance of alignment. Since many patients are over 70s in their age, excessive correction of the alignment with many implants may bring harmful result. Hydroxyapatite has long been used as a spacer of laminoplasty, but several complications have been reported such as back-out or dislodgement of the spacer. We have created a brand new titanium spacer called “Laminoplasty Basket” for cervical laminoplasty. This new spacer is now on the market since 2013, and can be used for both open-door laminoplasty and double-door laminoplasty. This spacer is considered to be a universal model in this point. In this presentation, we will demonstrate the usefulness of cervical laminoplasty with this spacer.