The Importance to Preserve a Posterior Tension Band in Cervical Stenosis Decompression. A Study with 24 Months Follow up

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Introduction: Traditional methods of cervical decompressive laminectomy require stripping of the posterior cervical muscular, as well as ligamentous, attachments to the spine, some patients will go on to develop iatrogenic swan neck deformity. Minimally invasive techniques allow to preserve the posterior muscle and ligament posterior tension band traduced in short surgical time, less bleeding and quickly reinsertion in daily activities with cervical stability.

Materials and methods: Nine patients with cervical mielopathy, due cervical posterior compression in one level and no significant anterior disc disease without radiographic signs of segmental instability, who’s underwent a minimally invasive biportal cervical decompression with a Maxcess retractor (Nuvasive, Inc. San Diego ,CA), a number of variables have been reported: patient mean age, vas, oswestry and neck disability index on Preop, Pop 6 weeks, 3,6,12 and 24 months, surgical time, amount of bleeding, time to discharge and return to normal activities.

Results: Mean patient age: 56 years old, Preop Vas 8.3 , 6 weeks 3.5, 3 months 3.0 , 6 months 2.7 , 12 months 2.4 and 24 months 2.0. Oswestry preop 52 , on 24 months 11. The mean surgical time was 81 minutes, bleeding 30cc, time to discharge 10 hours and return to normal activities was mean 9.8 days.

Conclusions: Minimally invasive posterior biportal cervical decompression is an effective ambulatory option to achieve clinical improvement in patients with cervical stenosis with less bleeding, The advantage to preserve the posterior muscle and ligament tension band allow the patients in short time to return to normal activities.