論文審査の結果の要旨及び担当者

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論文審査の結果の要旨

頚部脊髄症に対する頚椎椎弓形成術施行後1年における遺残性頚部痛と健康関連QOLに、頚椎単純X線画像評価項目が何らかの影響を与えているのか否かを頚椎症性脊髄症(35例)と頚椎後縦靭帯骨化症(22例)の疾患別に検討した。評価項目としては、臨床評価に日本整形外科学会頚髄症治療成績判定基準、10秒テスト、日本整形外科学会頚部脊髄症評価質問票(頚椎機能・上肢機能・下肢機能・膀胱機能・QOL)、頚部痛のVisual Analogue Scaleを、画像評価にC2 sagittal vertical axis、頚椎前弯角、C7椎体傾斜、頚椎前後屈可動域を用いた。いずれの疾患も遺残性頚部痛および健康関連QOLと画像評価項目との間に相関を認めなかった。一方で、遺残性頚部痛と健康関連QOL、特に上肢の機能評価の項目との間に相関を認めた。遺残性頚部痛の原因として、神経学的な異常所見が関与している可能性が示されたことから、今後の更なる臨床研究の発展に寄与する内容となっており、学位論文に値すると考える。

論　文　内　容　の　要　旨
Synopsis of Thesis

氏　名 Name	藤原　啓恭
論文題名 Title	Impact of Cervical Sagittal Alignment on Axial Neck Pain and Health-related Quality of Life After Cervical Laminoplasty in Patients With Cervical Spondylotic Myelopathy or Ossification of the Posterior Longitudinal Ligament A Prospective Comparative Study (頚椎椎弓形成術後の頚部痛および健康関連QOLに対して頚椎矢状面アライメントが与える影響について．－頚椎症性脊髄症と頚椎後縦靭帯骨化症との前向き比較研究－)

論文内容の要旨

Purpose: Many studies have focused on postoperative axial neck pain after laminoplasty. However, the correlation among cervical sagittal alignment, neck pain, and a newly-developed patient-based quality of life outcome measure; the Japanese Orthopaedic Association Cervical Myelopathy Evaluation Questionnaire (JOACMEQ) has not been investigated. The purpose of this study was to prospectively investigate the correlation among axial neck pain, the JOACMEQ, and cervical sagittal alignment after open-door laminoplasty for cervical myelopathy.

Methods: Fifty-seven consecutive patients treated by open-door laminoplasty for cervical myelopathy were included (mean age: 63.7 years; 15 women and 42 men) and divided into two groups according to diagnosis (CSM group: 35 patients, and OPLL group: 22 patients). JOA score, a sub-domain of cervical spine function (CSF) in the JOACMEQ, and the visual analog scale for axial neck pain were assessed preoperatively and 12 months postoperatively. Radiographic cervical sagittal parameters were measured by C2 sagittal vertical axis (C2 SVA), C2-C7 lordosis, C7 sagittal slope (C7 slope), and range of motion.

Results: C2 SVA values in both groups shifted slightly anteriorly between preoperative and 12 months postoperative measurements (CSM: +19.7±10.9 mm, OPLL: +22.1±13.4 mm versus CSM: +23.2±16.1 mm, OPLL: +28.7±15.4 mm, respectively). Postoperative axial neck pain in the OPLL group showed strong negative correlations with C2 SVA and C7 slope. Strong negative correlations were found between axial neck pain and CSF in both the preoperative CSM and OPLL groups (CSM; r=-0.45, p=0.01, OPLL; r=-0.61, p<0.01) and between axial neck pain and CSF in the postoperative OPLL group (r=-0.51, p=0.05).

Conclusions: This study demonstrated a significant negative correlation between neck pain and cervical spine function in both the CSM and OPLL groups preoperatively and in the OPLL group postoperatively. Radiographic cervical sagittal alignment did not significantly correlate with preoperative or postoperative axial neck pain.