

Cervical laminectomy complications

Injury to spinal cord and nerve roots

The overall incidence of neurological complications has been reported as 0.18% ¹⁾ and increases with severe cervical kyphosis correction (2.6%) ²⁾. Late neurological complications can be avoided in posterior corrective surgery for cervical kyphosis by prophylactic foraminotomies in the presence of foraminal stenosis, kyphosis correction that does not exceed 9.7° per spinal segment and avoiding kyphosis correction at C4–C5, which is where the largest posterior shift of the spinal cord occurs leading to C5 palsy ^{3) 4)}. This is a common problem but most cases resolve spontaneously. Similar to anterior surgery, spinal cord monitoring is a good adjunct monitoring tool.

Cervical laminectomy may cause postoperative cervical kyphotic deformity leading to segmental instability over time. Laminoplasty may be an alternative procedure to laminectomy, as it protects the spine against post-laminectomy kyphosis; however, similar to laminectomy, laminoplasty may cause sagittal plane deformities by destructing or weakening the dorsal tension band.

PEEK rod-cervical lateral mass screw systems may be useful in motion preservation surgery of the posterior cervical region ⁵⁾.

Cervical kyphotic deformity

see [Cervical kyphotic deformity](#).

Infection

Postoperative [discitis](#)....

¹⁾

Currier BL. Neurological complications of cervical spine surgery: C5 palsy and intraoperative monitoring. Spine (Phila Pa 1976). 2012;37(5):E328-E334. doi:10.1097/BRS.0b013e3182417276

^{2) 3)},

Hojo Y, Ito M, Abumi K, et al. A late neurological complication following posterior correction surgery of severe cervical kyphosis. Eur Spine J. 2011;20(6):890-898. doi:10.1007/s00586-010-1590-8

⁴⁾
Citation text Geck MJ, Macagno A, Ponte A, Shufflebarger HL. The Ponte procedure: posterior only treatment of Scheuermann's kyphosis using segmental posterior shortening and pedicle screw instrumentation. J Spinal Disord Tech. 2007;20(8):586-593. doi:10.1097/BSD.0b013e31803d3b16

⁵⁾
Aydin AL, Sasani M, Erbulut DU, Oktenoglu T, Ozer AF. A new concept of motion preservation surgery of the cervical spine: PEEK rods for the posterior cervical region [published online ahead of print, 2020 Sep 3]. Biomed Mater Eng. 2020;10.3233/BME-206004. doi:10.3233/BME-206004

From:
<https://neurosurgerywiki.com/wiki/> - **Neurosurgery Wiki**



Permanent link:
https://neurosurgerywiki.com/wiki/doku.php?id=cervical_laminectomy_complications

Last update: **2024/06/07 03:00**