UNIVERSITAS
GADJAH MADA
Korelasi Ketebalan dan Panjang Ossification Posterior Longitudinal Ligament Vertebrae Servikal dengan Diameter Anteroposterior Kanalis Spinalis Menggunakan Magnetic Resonance Imaging
Nurhani, Dr. dr. Bambang Supriyadi, Sp. Rad., Subsp. MSK (K), MM.; dr. Sri Retna Dwidanarti, Sp. Rad., Sp.Onk.Rad
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

DAFTAR PUSTAKA

Bae An, S. (2019). Evaluating the differences between 1D, 2D, and 3D occupying ratios in reflecting the JOA score in cervical ossification of the posterior longitudinal ligament. *Quantitative Imaging in Medicine and Surgery*, *9*, 6. https://doi.org/10.21037/qims.2019.05.26

Bakhsh, W., Saleh, A., Yokogawa, N., Gruber, J., Rubery, P.T., & Mesfin, A. (2019). cervical Ossification of the Posterior Longitudinal Ligament: A Computed Tomography-Based Epidemiological Study of 2917 Patients. *Global Spine J.* 9 : 820–825. Available at: https://doi.org/10.1177/2192568219833658

Chen, S. (2025). Analysis of related factors affecting the postoperative clinical outcome of cervical ossification of the posterior longitudinal ligament. *Journal of Orthopaedic Surgery and Research*, *20*, 849. https://doi.org/10.1186/s13018-025-06276-z

Cohen, J. (1992). Quantitive Methods in Psychology. *Psychological Bulletin*, *112*(1).

Dahlan, M. S. (2017). Pintu Gerbang Memahami Statistik Metodologi Dan Epidemiologi Metode MSD M. Sopiyudin Dahlan. *Sari Pediatri*, *2*(1).

D'Antoni*, A. V. (2016). Gray's Anatomy, the Anatomical Basis of Clinical Practice, Forty-First Edition, by SusanStandring, Editor-in-Chief, Elsevier Limited , 2016, 1,562 Pages, Hardcover, $228.99 ($171.74), ISBN: 978-0-7020-5230-9. . *Clinical Anatomy*, *29*(2). https://doi.org/10.1002/ca.22677

Feng, B., Cao, S., Zhai, J., Ren, Y., Hu, J., Tian, Y., *et al.* (2018). Roles and mechanisms of leptin in osteogenic stimulation in cervical ossification of the posterior longitudinal ligament. *J. Orthop. Surg. Res.* 13. Available at: https://doi.org/10.1186/S13018-018-0864-4

Funaba, M., Imajo, Y., Suzuki, H., Nishida, N., Nagao, Y., Sakamoto, T., *et al.* (2020). The radiological characteristics associated with the development of myelopathy due to ossification of the posterior longitudinal ligaments at each

UNIVERSITAS
GADJAH MADA
Korelasi Ketebalan dan Panjang Ossification Posterior Longitudinal Ligament Vertebrae Servikal dengan Diameter Anteroposterior Kanalis Spinalis Menggunakan Magnetic Resonance Imaging
Nurhani, Dr. dr. Bambang Supriyadi, Sp. Rad., Subsp. MSK (K), MM.; dr. Sri Retna Dwidanarti, Sp. Rad., Sp.Onk.Ra
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

responsible level based on spinal cord evoked potentials. *Clin. Neurol. Neurosurg.* 194. Available at: https://doi.org/10.1016/j.clineuro.2020.105814

Head, J., Rymarczuk, G., Stricsek, G., Velagapudi, L., Maulucci, C., Hoelscher, C., & Harrop, J. (2019). Ossification of the posterior longitudinal ligament: Surgical approaches and associated complications. *Neurospine*, *16*(3). https://doi.org/10.14245/ns.1938222.111

Kang, Y., Lee, J. W., Koh, Y. H., Hur, S., Kim, S. J., Chai, J. W., & Kang, H. S. (2011a). New MRI grading system for the cervical canal stenosis. *American Journal of Roentgenology*, *197*(1). https://doi.org/10.2214/AJR.10.5560

Kang, Y., Lee, J. W., Koh, Y. H., Hur, S., Kim, S. J., Chai, J. W., & Kang, H. S. (2011b). New MRI grading system for the cervical canal stenosis. *American Journal of Roentgenology*, *197*(1). https://doi.org/10.2214/AJR.10.5560

Kim, T. J., Kim, T. H., Jun, J. B., Joo, K. Bin, & Uhm, W. S. (2007). Prevalence of ossification of posterior longitudinal ligament in patients with ankylosing spondylitis. *Journal of Rheumatology*, *34*(12).

Kwon, W.K., Ham, C.H., Moon, H.J., Kim, J.H., & Park, Y.K. (2023). Radiologic risk factors associated with development of myelopathy in patients with ossification of the posterior longitudinal ligament of the cervical spine. *Clin. Neurol. Neurosurg.* 227. Available at: https://doi.org/10.1016/j.clineuro.2023.107668

Le, H. V., Wick, J.B., Van, B.W., & Klineberg, E.O. (2022a). Ossification of the Posterior Longitudinal Ligament: Pathophysiology, Diagnosis, and Management. *J. Am. Acad. Orthop. Surg.* 30 : 820–830. Available at: https://doi.org/10.5435/JAAOS-D-22-00049

Le, H. V., Wick, J.B., Van, B.W., & Klineberg, E.O. (2022b). Ossification of the Posterior Longitudinal Ligament: Pathophysiology, Diagnosis, and Management. *J. Am. Acad. Orthop. Surg.* 30 : 820–830. Available at: https://doi.org/10.5435/JAAOS-D-22-00049

Lee, K.H., Park, H.J., Lee, S.Y., Kim, M.S., Lee, Y.T., Kim, Y.B., *et al.* (2020a). Inter-observer reliability and clinical validity of the MRI grading system for

UNIVERSITAS
GADJAH MADA
Korelasi Ketebalan dan Panjang Ossification Posterior Longitudinal Ligament Vertebrae Servikal dengan Diameter Anteroposterior Kanalis Spinalis Menggunakan Magnetic Resonance Imaging
Nurhani, Dr. dr. Bambang Supriyadi, Sp. Rad., Subsp. MSK (K), MM.; dr. Sri Retna Dwidanarti, Sp. Rad., Sp.Onk.Ra
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

cervical central stenosis based on sagittal T2-weighted image. *Eur. J. Radiol.* 127. Available at: https://doi.org/10.1016/j.ejrad.2020.108987

Lee, K.H., Park, H.J., Lee, S.Y., Kim, M.S., Lee, Y.T., Kim, Y.B., *et al.* (2020b). Inter-observer reliability and clinical validity of the MRI grading system for cervical central stenosis based on sagittal T2-weighted image. *Eur. J. Radiol.* 127. Available at: https://doi.org/10.1016/j.ejrad.2020.108987

Lee, S. Y., Shin, Y. R., Park, H. J., Rho, M. H., & Chung, E. C. (2017). Usefulness of multiecho fast field echo MRI in the evaluation of ossification of the posterior longitudinal ligament and dural ossification of the cervical spine. *PLoS ONE*, *12*(8). https://doi.org/10.1371/journal.pone.0183744

Liao, X., Jin, Z., Shi, L., Zhao, Y., Zhou, S., Chen, D., *et al.* (2020). Prevalence of Ossification of Posterior Longitudinal Ligament in Patients With Degenerative cervical Myelopathy: cervical Spine 3D CT Observations in 7210 Cases. *Spine (Phila. Pa. 1976).* 45 : 1320–1328. Available at: https://doi.org/10.1097/BRS.0000000000003526

Matsunaga, S., & Sakou, T. (2012). Ossification of the posterior longitudinal ligament of the cervical spine: Etiology and natural history. In *Spine* (Vol. 37, Number 5). https://doi.org/10.1097/BRS.0b013e318241ad33

Mori, K., Yoshii, T., Egawa, S., Sakai, K., Kusano, K., Tsutsui, S., *et al.* (2022). Impact of obesity on cervical ossification of the posterior longitudinal ligament: a nationwide prospective study. *Sci. Rep.* 12. Available at: https://doi.org/10.1038/S41598-022-12625-3

Opara, J., & Odzimek, M. (2024). cervical Spondylotic Myelopathy—Diagnostics and Clinimetrics. In *Diagnostics* (Vol. 14, Number 5). https://doi.org/10.3390/diagnostics14050556

Otomo, N. (2025). Identification of Risk Factors for Long-Term Surgical Outcomes Following Laminoplasty for cervical Ossification of the Posterior Longitudinal Ligament. *Sage Journals*. https://doi.org/10.1177/21925682251347507

Pratali, R.R., Smith, J.S., Ancheschi, B.C., Maranho, D.A., Savarese, A., Nogueira-Barbosa, M.H., *et al.* (2019). A Technique for Dynamic cervical Magnetic

UNIVERSITAS
GADJAH MADA
Korelasi Ketebalan dan Panjang Ossification Posterior Longitudinal Ligament Vertebrae Servikal dengan Diameter Anteroposterior Kanalis Spinalis Menggunakan Magnetic Resonance Imaging
Nurhani, Dr. dr. Bambang Supriyadi, Sp. Rad., Subsp. MSK (K), MM.; dr. Sri Retna Dwidanarti, Sp. Rad., Sp.Onk.Ra
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Resonance Imaging Applied to cervical Spondylotic Myelopathy: A Reliability Study. *Spine (Phila. Pa. 1976).* 44 : E26–E32. Available at: https://doi.org/10.1097/BRS.0000000000002765

Shi, L., Miao, J., Chen, D., Shi, J., & Chen, Y. (2019). Endoplasmic reticulum stress regulates mechanical stress-induced ossification of posterior longitudinal ligament. *Eur. Spine J.* 28 : 2249–2256. Available at: https://doi.org/10.1007/S00586-019-06074-2

Shimokawa, N., Sato, H., Matsumoto, H., & Takami, T. (2019a). Review of radiological parameters, imaging characteristics, and their effect on optimal treatment approaches and surgical outcomes for cervical ossification of the posterior longitudinal ligament. *Neurospine*, *16*(3). https://doi.org/10.14245/ns.1938268.134

Shimokawa, N., Sato, H., Matsumoto, H., & Takami, T. (2019b). Review of radiological parameters, imaging characteristics, and their effect on optimal treatment approaches and surgical outcomes for cervical ossification of the posterior longitudinal ligament. *Neurospine*, *16*(3). https://doi.org/10.14245/ns.1938268.134

Skandalakis, J. E. (1999). Clinically Oriented Anatomy. *JAMA: The Journal of the American Medical Association*, *282*(15). https://doi.org/10.1001/jama.282.15.1485

Smith, Z. A., Buchanan, C. C., Raphael, D., & Khoo, L. T. (2011). Ossification of the posterior longitudinal ligament: Pathogenesis, management, and current surgical approaches: A review. In *Neurosurgical Focus* (Vol. 30, Number 3). https://doi.org/10.3171/2011.1.FOCUS10256

Staff. (2022). cervical *Vertebrae (*cervical *Spine)*. The Skeletalsystem.net.

The mJOA questionnaire. (n.d.). dochub.com. Retrieved https://www.dochub.com/jsfiller-desk13/?traceparent=00-6baa1fce923e7bc84ca050419c16e25f-f6cc71968f94802c-00&flat_pdf_quality=high&mode=cors&requestHash=1a70048b82afe6422fb03249badc4d1adf66b4f81c902e35108c1f3f7e57d752&lang=en&projectId=1990492732&richTextF

UNIVERSITAS
GADJAH MADA
Korelasi Ketebalan dan Panjang Ossification Posterior Longitudinal Ligament Vertebrae Servikal dengan Diameter Anteroposterior Kanalis Spinalis Menggunakan Magnetic Resonance Imaging
Nurhani, Dr. dr. Bambang Supriyadi, Sp. Rad., Subsp. MSK (K), MM.; dr. Sri Retna Dwidanarti, Sp. Rad., Sp.Onk.Ra
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Tu, J., Castillo, J. V., Das, A., & Diwan, A. D. (2021). Degenerative cervical myelopathy: Insights into its pathobiology and molecular mechanisms. In *Journal of Clinical Medicine* (Vol. 10, Number 6). https://doi.org/10.3390/jcm10061214

Ulbrich, E. J., Schraner, C., Boesch, C., Hodler, J., Busato, A., Anderson, S. E., Eigenheer, S., Zimmermann, H., & Sturzenegger, M. (2014a). Normative MR cervical spinal canal dimensions. *Radiology*, *271*(1). https://doi.org/10.1148/radiol.13120370

Ulbrich, E. J., Schraner, C., Boesch, C., Hodler, J., Busato, A., Anderson, S. E., Eigenheer, S., Zimmermann, H., & Sturzenegger, M. (2014b). Normative MR cervical spinal canal dimensions. *Radiology*, *271*(1). https://doi.org/10.1148/radiol.13120370

Wang, L., Jiang, Y., Li, M., & Qi, L. (2019). Postoperative Progression of cervical Ossification of Posterior Longitudinal Ligament: A Systematic Review. *World Neurosurg.* 126 : 593–600. Available at: https://doi.org/10.1016/j.wneu.2019.03.229

Wang, Z., Sun, Y., Tang, Y., Yuan, B., Zhou, S., Chen, X., & Jia, L. (2018). Assessment of Myelopathy in cervical Ossification of the Posterior Longitudinal Ligament by Magnetic Resonance Imaging–Assisted 3-Dimensional Measurement. *World Neurosurgery*, *115*. https://doi.org/10.1016/j.wneu.2018.03.222

Yan, L., Gao, R., Liu, Y., He, B., Lv, S., & Hao, D. (2017). The Pathogenesis of Ossification of the Posterior Longitudinal Ligament. *Aging Dis.* 8 : 570–582. Available at: https://doi.org/10.14336/AD.2017.0201

Zhao, Q., Xie, D., Wu, H., Wang, L., Chen, Q., Shi, M., Niu, B., & Yang, L. (2024). Correlation of spinal cord compression angle and increased signal intensity on MRI in patients with ossification of posterior longitudinal ligament. *Scientific Reports*, *14*(1). https://doi.org/10.1038/s41598-024-69100-4