DAFTAR PUSTAKA

Altinkaya, N., & Cekinmez, M., 2016. Lumbar multifidus muscle changes in unilateral lumbar disc herniation using magnetic resonance imaging. *Skeletal Radiol.* 45: 73–77. doi:10.1007/s00256-015-2252-z

Aprisandi, A., & Silaban, G., 2023. Analisis faktor penyebab tingkatan gangguan Low Back Pain (LBP) pada pengrajin daun nipah di Kelurahan Terjun Kecamatan Medan Marelan. *Trop. Public Heal. J.* 3: 1–7. doi:10.32734/trophico.v3i1.11338

Balsano, M., Härtl, R., & Hussain, I., 2020. Lumbar disc herniation – central and posterolateral [WWW Document]. URL https://surgeryreference.aofoundation.org/spine/degenerative/lumbar

Banitalebi, H., Aaen, J., Storheim, K., Negård, A., Myklebust, T.Å., Grotle, M., et al., 2022. A novel MRI index for paraspinal muscle fatty infiltration: reliability and relation to pain and disability in lumbar spinal stenosis: results from a multicentre study. *Eur. Radiol. Exp.* 6. doi:10.1186/s41747-022-00284-y

Berry, D.B., Padwal, J., Johnson, S., Parra, C.L., Ward, S.R., & Shahidi, B., 2018. Methodological considerations in region of interest definitions for paraspinal muscles in axial MRIs of the lumbar spine. *BMC Musculoskelet. Disord.* 19: 1–9. doi:10.1186/s12891-018-2059-x

Dahlan, S., 2014. Statistik Untuk Kedokteran dan Kesehatan. Epidemiologi Indonesia.

Ding, J. zhe, Kong, C., Li, X. yu, Sun, X. yao, Lu, S. bao, & Zhao, G. gunag, 2022. Different degeneration patterns of paraspinal muscles in degenerative lumbar diseases: a MRI analysis of 154 patients. *Eur. Spine J.* 31: 764–773. doi:10.1007/s00586-021-07053-2

Drake FAAA, R.L., Wayne Vogl FAAA, A., & Mitchell MBBS FRCS FRCR, A.W., 2023. Gray's Basic Anatomy 3rd edition, Elsevier.

Ekin, E.E., Yıldız, H.K., & Mutlu, H., 2016. Age and sex-based distribution of lumbar multifidus muscle atrophy and coexistence of disc hernia: An MRI study of 2028 patients. *Diagnostic Interv. Radiol.* 22: 273–276. doi:10.5152/dir.2015.15307

Elfadle, A.A., Zarad, C.A., Elmaaty, A.A.A., El-Nagaa, B.F.A., & Soliman, A.Y., 2022. Correlation between lumbar spinal canal magnetic resonance imaging grading systems and parameters in lumbar spinal canal compromise. *Egypt. J. Neurol. Psychiatry Neurosurg.* 58. doi:10.1186/s41983-022-00543-0

Faur, C., Patrascu, J.M., Haragus, H., & Anglitoiu, B., 2019. Correlation between

multifidus fatty atrophy and lumbar disc degeneration in low back pain. *BMC Musculoskelet. Disord.* 20: 414. doi:10.1186/s12891-019-2786-7

Fortin, M., & Battie, M.C., 2012. Quantitative Paraspinal Muscle Measurements: Inter-Software Reliability and Agreement Using OsiriX and ImageJ. *Phys. Ther.* 92: 853–864. doi:10.2522/ptj.20110380

Fortin, M., Omidyeganeh, M., Battié, M.C., Ahmad, O., & Rivaz, H., 2017. Evaluation of an automated thresholding algorithm for the quantification of paraspinal muscle composition from MRI images. *Biomed. Eng. Online* 16: 1–12. doi:10.1186/s12938-017-0350-y

Han, G., Jiang, Y., Zhang, B., Gong, C., & Li, W., 2021. Imaging Evaluation of Fat Infiltration in Paraspinal Muscles on MRI: A Systematic Review with a Focus on Methodology. *Orthop. Surg.* 13: 1141–1148. doi:10.1111/os.12962

Han, G., Wu, H., Dai, J., Li, X., Yue, L., Fan, Z., et al., 2023. Does paraspinal muscle morphometry predict functional status and re-operation after lumbar spinal surgery? A systematic review and meta-analysis. *Eur. Radiol.* 33: 5269–5281. doi:10.1007/s00330-023-09548-6

Harries, A., & Fox, J.C., 2020. MRI of the spine, Clinical Emergency Radiology. doi:10.1017/CBO9780511551734.040

Hida, T., Eastlack, R.K., Kanemura, T., Mundis, G.M., Imagama, S., & Akbarnia, B.A., 2021. Effect of race, age, and gender on lumbar muscle volume and fat infiltration in the degenerative spine. *J. Orthop. Sci.* 26: 69–74. doi:10.1016/j.jos.2019.09.006

Hildebrandt, M., Fankhauser, G., Meichtry, A., & Luomajoki, H., 2017. Correlation between lumbar dysfunction and fat infiltration in lumbar multifidus muscles in patients with low back pain. *BMC Musculoskelet. Disord.* 18: 1–9. doi:10.1186/s12891-016-1376-1

Ikhsanawati, A., Tiksnadi, B., Soenggono, A., & Hidajat, N.N., 2015. Herniated Nucleus Pulposus in Dr. Hasan Sadikin General Hospital Bandung Indonesia. *Althea Med. J.* 2: 179–185. doi:10.15850/amj.v2n2.568

Jensen, M.C., Kelly, A.P., & Brant-Zawadzki, M.N., 2021. MRI of degenerative disease of the lumbar spine., Magnetic resonance quarterly.

Jermy, J.E., Copley, P.C., Poon, M.T.C., & Demetriades, A.K., 2020. Does pre-operative multifidus morphology on MRI predict clinical outcomes in adults following surgical treatment for degenerative lumbar spine disease? A systematic review. *Eur. Spine J.* 29: 1318–1327. doi:10.1007/s00586-020-06423-6

Kader, D.F., Wardlaw, D., & Smith, F.W., 2000. Correlation between the MRI changes in the lumbar multifidus muscles and leg pain. *Clin. Radiol.* 55: 145–149. doi:10.1053/crad.1999.0340

Kushchayev, S. V., Glushko, T., Jarraya, M., Schuleri, K.H., Preul, M.C., Brooks, M.L., et al., 2018. Degenerate spine. *Insights Imaging* 9: 253–274.

Liu, C., Xue, J., Liu, J., Ma, G., Moro, A., Liang, T., et al., 2021. Is there a correlation between upper lumbar disc herniation and multifidus muscle degeneration? A retrospective study of MRI morphology. *BMC Musculoskelet. Disord.* 22: 1–8. doi:10.1186/s12891-021-03970-x

Ma, D., Liang, Y., Wang, D., Liu, Z., Zhang, W., Ma, T., et al., 2013. Trend of the incidence of lumbar disc herniation: Decreasing with aging in the elderly. *Clin. Interv. Aging* 8: 1047–1050. doi:10.2147/CIA.S49698

Mandelli, F., Nüesch, C., Zhang, Y., Halbeisen, F., Schären, S., Mündermann, A., et al., 2021. Assessing Fatty Infiltration of Paraspinal Muscles in Patients With Lumbar Spinal Stenosis: Goutallier Classification and Quantitative MRI Measurements. *Front. Neurol.* 12: 1–12. doi:10.3389/fneur.2021.656487

Netter, M.F.H., 2016. Atlas of Human Anatomy, Elsevier. doi:10.5005/jp/books/12658_17

Ranger, T.A., Cicuttini, F.M., Jensen, T.S., Peiris, W.L., Hussain, S.M., Fairley, J., et al., 2017. Are the size and composition of the paraspinal muscles associated with low back pain? A systematic review. *Spine J.* 17: 1729–1748. doi:10.1016/j.spinee.2017.07.002

Reimer, P., Parizer, P., Meaney, J., & Stichnoth, F., 2016. Clinical MR Imaging, Clinical MR Imaging. doi:10.1007/978-3-642-97990-3

Samartzis, D., Karppinen, J., Luk, K.D., & Cheung, K.M., 2014. Body Mass Index and its Association with Lumbar Disc Herniation and Sciatica: A Large-Scale, Population-Based Study. *Glob. Spine J.* 4: s-0034-1376593-s-0034-1376593. doi:10.1055/s-0034-1376593

Sasaki, T., Yoshimura, N., Hashizume, H., Yamada, H., Oka, H., Matsudaira, K., et al., 2017. MRI-defined paraspinal muscle morphology in Japanese population: The Wakayama Spine Study. *PLoS One* 12: 1–15. doi:10.1371/journal.pone.0187765

Seyedhoseinpoor, T., Taghipour, M., Dadgoo, M., Sanjari, M.A., Takamjani, I.E., Kazemnejad, A., et al., 2022. Alteration of lumbar muscle morphology and composition in relation to low back pain: a systematic review and meta-analysis. *Spine J.* 22: 660–676. doi:10.1016/j.spinee.2021.10.018

Shi, L., Yan, B., Jiao, Y., Chen, Z., Zheng, Y., Lin, Y., et al., 2022. Correlation between the fatty infiltration of paraspinal muscles and disc degeneration and the underlying mechanism. *BMC Musculoskelet. Disord.* 23: 1–13. doi:10.1186/s12891-022-05466-8

Suo, M., Zhang, J., Sun, T., Wang, J., Liu, X., Huang, H., et al., 2023. The association between morphological characteristics of paraspinal muscle and spinal disorders. *Ann. Med.* 55. doi:10.1080/07853890.2023.2258922

Teichtahl, A.J., Urquhart, D.M., Wang, Y., Wluka, A.E., Wijethilake, P., O'Sullivan, R., et al., 2015. Fat infiltration of paraspinal muscles is associated with low back pain, disability, and structural abnormalities in community-based adults. *Spine J.* 15: 1593–1601. doi:10.1016/j.spinee.2015.03.039

Tomography, C., Moeller, T.B., & Reif, E., 2008. Pocket Atlas of Sectional Anatomy: Computed Tomography and Magnetic Resonance Imaging, Vol 3: Spine, Extremities, Joints, 3rd ed. *Radiology* 248: 391–391. doi:10.1148/radiol.2482082519

Urrutia, J., Besa, P., Lobos, D., Andia, M., Arrieta, C., & Uribe, S., 2018. Is a single-level measurement of paraspinal muscle fat infiltration and cross-sectional area representative of the entire lumbar spine? *Skeletal Radiol.* 47: 939–945. doi:10.1007/s00256-018-2902-z

WHO, 2023. No Title [WWW Document]. *World Heal. Organ.* URL https://www.who.int/news-room/fact-sheets/detail/low-back-pain#

Yazici, A., & Yerlikaya, T., 2022. The relationship between the degeneration and asymmetry of the lumbar multifidus and erector spinae muscles in patients with lumbar disc herniation with and without root compression. *J. Orthop. Surg. Res.* 17: 1–13. doi:10.1186/s13018-022-03444-3