

DAFTAR PUSTAKA

- Azzena, B. *et al.* (2016) ‘Late complications of high-voltage electrical injury might involve multiple systems and be related to current path’, *Annals of burns and fire disasters*, 29(3), pp. 192–194. Available at: <https://europepmc.org/articles/PMC5266236> (Accessed: 25 November 2022).
- Barros, A.G.C. de *et al.* (2019) ‘Evaluation of the effects of erythropoietin and interleukin-6 in rats submitted to acute spinal cord injury’, *Clinics*, 74. Available at: <https://doi.org/10.6061/clinics/2019/e674>.
- Blumenfeld, H. (2010). Neuroanatomy through clinical cases. In *Neuroanatomy through clinical cases*.
- Chen, J.Y. *et al.* (2021) ‘Lentiviral Interleukin-10 Gene Therapy Preserves Fine Motor Circuitry and Function After a Cervical Spinal Cord Injury in Male and Female Mice’, *Neurotherapeutics*, 18(1), pp. 503–514. Available at: <https://doi.org/10.1007/s13311-020-00946-y>.
- Choi, K. H., & Hwang, H. S. (2012). Radiological and pathological evaluation of the spinal cord in a rat model of electrical injury-induced myelopathy. *Burns*, 1–6. <https://doi.org/10.1016/j.burns.2012.02.016>
- Cramer, G. D. S. A. D. (2014). *Clinical Anatomy of the Spine, Spinal Cord, and ANS, Third Edition* (3rd ed.). Elsevier Ltd.
- Dahlan, M. S. (2014). Uji One Way (Uji Hipotesis Komperatif Numerik Lebih dari Dua Kelompok Tidak Berpasangan Berdistribusi Normal). In *Statistik Untuk Kedokteran dan Kesehatan: Deskriptif, Bivariat, dan Multivariat Dilengkapi Aplikasi Menggunakan SPSS*.
- David, S., López-Vales, R. and Wee Yong, V. (2012) ‘Chapter 30 - Harmful and beneficial effects of inflammation after spinal cord injury: potential therapeutic implications’, in J. Verhaagen and J.W. McDonald (eds) *Handbook of Clinical Neurology*. Elsevier (Spinal Cord Injury), pp. 485–502. Available at: <https://doi.org/10.1016/B978-0-444-52137-8.00030-9>.

- Dogru, H., Akpınar, C. K., Gungor, L., Balci, K. (2016). Acute Ischemic Stroke Associated with Low-voltage Electrical Injury: A Case Report. *Turk J Neurol*, 22, 30-32.
- Dolf Gielen and Francisco Boshell et al (2019). The role of renewable energy in the global energy transformation. *Energy Strategy Reviews* 24 38–50 Elsevier Ltd. <https://doi.org/10.1016/j.esr.2019.01006>
- Duff, K., & McCaffrey, R. J. (2001). Electrical injury and lightning injury: A review of their mechanisms and neuropsychological, psychiatric, and neurological sequelae. *Neuropsychology Review*, 11, 101–116. <https://doi.org/10.1023/A:1016623318049>
- Fakhri, S., Abbaszadeh, F. and Jorjani, M. (2021) ‘On the therapeutic targets and pharmacological treatments for pain relief following spinal cord injury: A mechanistic review’, *Biomedicine & Pharmacotherapy*, 139, p. 111563. Available at: <https://doi.org/10.1016/j.biopha.2021.111563>.
- Fan, K. W., Zhu, Z. X., & Den, Z. Y. (2005). An experimental model of an electrical injury to the peripheral nerve. *Burns*, 731–736. <https://doi.org/10.1016/j.burns.2005.02.022>
- Fuster, J.J. and Walsh, K. (2014) ‘The Good, the Bad, and the Ugly of interleukin-6 signaling’, *The EMBO Journal*, 33(13), pp. 1425–1427. Available at: <https://doi.org/10.15252/embj.201488856>.
- Fuster, J.J. and Walsh, K., 2014. The Good, the Bad, and the Ugly of interleukin-6 signaling. *The EMBO journal*, p.e201488856.
- Fathullah A. 2021. Pengaruh Trauma Listrik terhadap Kerusakan Neuron dan Ekspresi Neuron-Specific Enolase (NSE) pada Otak. **Thesis. Tidak Diterbitkan. Fakultas Kedokteran, Kesehatan Masyarakat dan Keperawatan Universitas Gadjah Mada: Yogyakarta**
- Freeman, C. B., Goyal, M., & Bourque, P. R. (n.d.). *MR Imaging Findings in Delayed Reversible Myelopathy from Lightning Strike*. Haque, A., Capone, M., Matzelle, D., Cox, A., & Banik, N. L. (2017). Targeting Enolase in Reducing Secondary Damage in Acute Spinal Cord Injury in Rats. *Neurochemical Research*. <https://doi.org/10.1007/s11064-017-2291-z>

- Ghanbari, A. *et al.* (2014) 'Evaluation of TNF- α and IL-6 Release in the Ventroposterolateral Nucleus of the Thalamus during Central Neuropathic Pain Induced by Electrical Injury of the Spinothalamic Tract in Male Rats: A Microdialysis Study', *Pathobiology Research*, 16(4), pp. 83–97. Available at: <http://mjms.modares.ac.ir/article-30-5932-en.html> (Accessed: 25 November 2022).
- Griffiths, H., D. Gao, and C. Pararasa. 2017. Redox regulation in metabolic programming and inflammation. *Redox Biology* 12: 50–57.
- Gruys, E., M. Toussaint, T. Niewold, and S. Koopmans. 2005. Acute phase reaction and acute phase proteins. *Journal of Zhejiang University SCIENCE B* 6B (11): 1045–1056.
- Guerrero, A.R. *et al.* (2012) 'Blockade of interleukin-6 signaling inhibits the classic pathway and promotes an alternative pathway of macrophage activation after spinal cord injury in mice', *Journal of Neuroinflammation*, 9(1), p. 40. Available at: <https://doi.org/10.1186/1742-2094-9-40>.
- Gwam, C., Mohammed, N., & Ma, X. (2021). Stem cell secretome, regeneration, and clinical translation: a narrative review. *Annals of Translational Medicine*, 9(1), 70–70. <https://doi.org/10.21037/atm-20-5030>
- Haque, A., Capone, M., Matzelle, D., Cox, A., & Banik, N. L. (2017). Targeting Enolase in Reducing Secondary Damage in Acute Spinal Cord Injury in Rats. *Neurochemical Research*, 42(10), 2777–2787. <https://doi.org/10.1007/s11064-017-2291-z>
- Haque, A., Ray, S. K., Cox, A., & Banik, N. L. (2016). Neuron specific enolase: a promising therapeutic target in acute spinal cord injury. In *Metabolic Brain Disease*. <https://doi.org/10.1007/s11011-016-9801-6>
- Heinrich, P.C., Castell, J.V. and Andus, T., 1990. Interleukin-6 and the acute phase response. *Biochemical journal*, 265:621.
- Hellenbrand, D.J. *et al.* (2019) 'Sustained interleukin-10 delivery reduces inflammation and improves motor function after spinal cord injury', *Journal*

of *Neuroinflammation*, 16(1), p. 93. Available at:
<https://doi.org/10.1186/s12974-019-1479-3>.

Ishii, H. *et al.* (2013) 'ifn- γ -dependent secretion of IL-10 from Th1 cells and microglia/macrophages contributes to functional recovery after spinal cord injury', *Cell Death & Disease*, 4(7), pp. e710–e710. Available at:
<https://doi.org/10.1038/cddis.2013.234>.

Iyer, S.S. and Cheng, G. (2012) 'Role of Interleukin 10 Transcriptional Regulation in Inflammation and Autoimmune Disease', *Critical reviews in immunology*, 32(1), pp. 23–63. Available at:
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3410706/> (Accessed: 25 November 2022).

Kjell, J. and Olson, L. (2016) 'Rat models of spinal cord injury: from pathology to potential therapies', *Disease Models & Mechanisms*, 9(10), pp. 1125–1137. Available at: <https://doi.org/10.1242/dmm.025833>.

Ko, S. H., Chun, W., & Kim, H. C. (2004). Delayed spinal cord injury following electrical burns: A 7-year experience. *Burns*, 1–5.
<https://doi.org/10.1016/j.burns.2004.03.007>

Konstantina G. Yiannopoulou *et al.* (2021) Neurological and neuropsychological complications of electrical injuries. *Neurologia i Neurochirurgia Polska* Polish Journal of Neurology and Neurosurgery. Volume 55, no. 1, pages: 12–23 DOI: 10.5603/PJNNS.a2020.0076

Kubistova, A., Horacek, J. and Novak, T., 2012. Increased interleukin-6 and tumor necrosis factor alpha in first episode schizophrenia patients versus healthy controls. *Psychiatria Danubina*, 24:153–156

Kumar, R.G. *et al.* (2015) 'Acute CSF interleukin-6 trajectories after TBI: Associations with neuroinflammation, polytrauma, and outcome', *Brain, Behavior, and Immunity*, 45, pp. 253–262. Available at:
<https://doi.org/10.1016/j.bbi.2014.12.021>.

Kurtulus, A., Acar, K., Adiguzel, E., & Boz, B. (2009). Hippocampal neuron loss due to electric injury in rats: A stereological study, *Legal Medicine*, 11, 59–63. <https://doi.org/10.1016/j.legalmed.2008.08.001>

- Lee, R. C. (1997). Injury by electrical forces: Pathophysiology, Manifestations, and therapy. In *Current Problems in Surgery* (Vol. 34, pp. 1–87). Mosby.
[https://doi.org/10.1016/s0011-3840\(97\)80007-x](https://doi.org/10.1016/s0011-3840(97)80007-x)
- Lee, R. C., Zhang, D., & Hannig, J. (2000). *BIOPHYSICAL INJURY MECHANISMS IN ELECTRICAL SHOCK TRAUMA*.
www.annualreviews.org
- Lee, R. C., Zhang, D., & Hannig, J. (2000). Biophysical injury mechanisms in electrical shock trauma. In *Annual Review of Biomedical Engineering* (Vol. 1, pp. 477–509). <https://doi.org/10.1146/annurev.bioeng.2.1.477>
- Liu, J. *et al.* (2020) ‘Spinal cord injury and its underlying mechanism in rats with temporal lobe epilepsy’, *Experimental and Therapeutic Medicine*, 19(3), pp. 2103–2112. Available at: <https://doi.org/10.3892/etm.2020.8453>.
- Loy, D. N., Sroufe, A. E., Pelt, J. L., Burke, D. A., Cao, Q. L., Talbott, J. F., & Whittemore, S. R. (2005). Serum biomarkers for experimental acute spinal cord injury: Rapid elevation of neuron-specific enolase and S-100 β . *Neurosurgery*, 56(2), 391–396.
<https://doi.org/10.1227/01.NEU.0000148906.83616.D2>.
- Mittal, M., M. Siddiqui, K. Tran, S. Reddy, and A. Malik. 2014. Reactive oxygen species in inflammation and tissue injury. *Antioxidants & Redox Signaling* 20 (7): 1126–1167.
- Morganti-Kossmann MC, Satgunaseelan L, Bye N: Modulation of immune response.
- Nogami, M., Takatsu, A., Endo, N., & Ishiyama, I. (1998). Immunohistochemistry of neuron-specific enolase in neurons of the medulla oblongata from human autopsies. *Acta Histochemica*, 100, 371–382. [https://doi.org/10.1016/S0065-1281\(98\)80034-2](https://doi.org/10.1016/S0065-1281(98)80034-2)
- Mukhamedshina, Y.O. *et al.* (2017) ‘Systemic and Local Cytokine Profile following Spinal Cord Injury in Rats: A Multiplex Analysis’, *Frontiers in Neurology*, 8. Available at: <https://doi.org/10.3389/fneur.2017.00581>.

Noor-Ahmad Latifi and Hamid Karimi (2016) Acute electrical injury: A systematic Review. *Journal of Acute Disease*. DOI: 10.12980/jad.6.2017JADWEB-2016-0055

Ogurcov, S. *et al.* (2021) ‘Blood Serum Cytokines in Patients with Subacute Spinal Cord Injury: A Pilot Study to Search for Biomarkers of Injury Severity’, *Brain Sciences*, 11(3), p. 322. Available at: <https://doi.org/10.3390/brainsci11030322>.

Pinho, A. G., Cibrão, J. R., Silva, N. A., Monteiro, S., & Salgado, A. J. (2020). Cell secretome: Basic insights and therapeutic opportunities for CNS disorders. In *Pharmaceuticals* (Vol. 13, Issue 2). MDPI AG. <https://doi.org/10.3390/ph13020031>.

Paul G, Khare V, and Gasche C. *Infamed Gut Mucosa: Downstream of Interleukin-10*. *European Journal of Clinical Investigation*. 201; 2 42(1): 95-109.

Pouw, M. H., Hosman, A. J. F., Van Middendorp, J. J., Verbeek, M. M., Vos, P. E., & Van De Meent, H. (2009). Biomarkers in spinal cord injury. *Spinal Cord*, 47, 519–525. <https://doi.org/10.1038/sc.2008.176>

Ramella-Roman, J. *et al.* (2012) ‘Better evaluation of electric shock injuries’, *SPIE Newsroom* [Preprint]. Available at: <https://doi.org/10.1117/2.1201203.004160>.

Reisner, A. D. (2014). Delayed neural damage induced by lightning and electrical injury: neural death, vascular necrosis and demyelination?. *Neural Regen Res*, 9(9), 907-908. <https://doi.org/10.4103/1673-5374.133130>

Rolfes S, Pinna K, Whitney E. 2014. Understanding normal and clinical nutrition. 10th ed. Brooks Cole.

Saputra C. 2022. Pengaruh Durasi Paparan Trauma Listrik terhadap Gambaran Histopatologis dan Imunoreaktivitas terhadap Neuron Specific Enolase pada Medulla Spinalis tikus Albino Galur Wistar (*Rattus norvegicus*). **Thesis. Tidak Diterbitkan. Fakultas Kedokteran, Kesehatan Masyarakat dan Keperawatan Universitas Gadjah Mada: Yogyakarta**

Scheller J, Chalaris A, Schmidt-Arras D, and RoseJohn S. *The Pro- and Anti-Inflammatory Properties of the Cytokine Interleukin-6*. *Biochimica et Biophysica Acta*. 2011; : 878-888 1813(5) .

Seo, C. H., Jeong, J. H., Lee, D. H., Kang, T. C., Jin, E. S., Lee, D. H., Jeon, S. R., SILVERSIDES J. THE NEUROLOGICAL SEQUELAE OF ELECTRICAL INJURY. *Can Med Assoc J*. 1964 Aug 1;91(5):195-204. PMID: 14179536; PMCID: PMC1927378.

Shanley, T.P., Foreback, J.L., Remick, D.G., Ulich, T.R., Kunkel, S.L. and Ward, P.A., 1997. Regulatory effects of interleukin-6 in immunoglobulin G immune-complex-induced lung injury. *The American journal of pathology*, 151:193.

Shupp, J.W. *et al.* (2012) ‘Examination of Local and Systemic In Vivo Responses to Electrical Injury Using an Electrical Burn Delivery System’, *Journal of Burn Care & Research*, 33(1), pp. 118–129. Available at: <https://doi.org/10.1097/BCR.0b013e3182373a50>.

Suwardi R. 2021. Pengaruh Durasi Lamanya Paparan Arus Listrik Terhadap Gambaran Histopatologi Cerebrum, Cerebellum, dan Brainstem (Studi Eksperimental pada Tikus Wistar Galur Murni). Thesis. Tidak Diterbitkan. Fakultas Kedokteran, Kesehatan Masyarakat dan Keperawatan Universitas Gadjah Mada: Yogyakarta.

Tafani, M., L. Sansone, F. Limana, T. Arcangeli, E. De Santis, M. Polese, et al. 2016. The interplay of reactive oxygen species, hypoxia, inflammation, and sirtuins in cancer initiation and progression. *Oxidative Medicine and Cellular Longevity* 2016: 1–18.

Tanaka, T., Narazaki, M. and Kishimoto, T. (2014) ‘IL-6 in Inflammation, Immunity, and Disease’, *Cold Spring Harbor Perspectives in Biology*, 6(10), p. a016295. Available at: <https://doi.org/10.1101/cshperspect.a016295>.

Tanapat, P. (2013). Neuronal Cell Markers. *Materials and Methods*. <https://doi.org/10.13070/mm.en.3.196>

- Telegin, G.B. *et al.* (2022) 'Plasma Cytokines Level and Spinal Cord MRI Predict Clinical Outcome in a Rat Glial Scar Cryoinjury Model', *Biomedicines*, 10(10), p. 2345. Available at: <https://doi.org/10.3390/biomedicines10102345>.
- Ten Donkelaar, H. J., Lammens, M., & Hori, A. (2014). Clinical Neuroembryology. In *Clinical Neuroembryology*. <https://doi.org/10.1007/978-3-642-54687-7>
- Thaddeus W and Karen K. Electrical Safety (2009) Centers for Disease Control and Prevention National Institute for Occupational Safety and Health.
- Tisoncik, J., M. Korth, C. Simmons, J. Farrar, T. Martin, and M. Katze. 2012. Into the eye of the cytokine storm. *Microbiology and Molecular Biology Reviews* 76 (1): 16–32.
- Tisoncik, J.R. *et al.* (2012) 'Into the Eye of the Cytokine Storm', *Microbiology and Molecular Biology Reviews*, 76(1), pp. 16–32. Available at: <https://doi.org/10.1128/MMBR.05015-11>.
- Tortora, Gerard J. and Bryan, Derrickson. 2020. Principles of Anatomy & Physiology. 16th ed. Danvers, MA: Wiley
- Uchiyama, T., Takahashi, H., Endo, H., Sakai, E., Hosono, K., Nagashima, Y. and Nakajima, A., 2012. IL-6 plays crucial roles in sporadic colorectal cancer through the cytokine networks including CXCL7. *Journal of Cancer Therapy*, 3:874-879
- Varghese, G., Mani, M. M., & Bedford, J. B. (1986). Spinal cord injuries following electrical accidents. *Paraplegia*, 159–166. <https://doi.org/10.1038/sc.1986.21>
- Woodcock T, Morganti-Kossmann MC: The role of markers of inflammation in traumatic brain injury. *Frontiers in Neuro*. 2013; 4(18):1-12
- Werhane, M.L. *et al.* (2017) 'Pathological vascular and inflammatory biomarkers of acute- and chronic-phase traumatic brain injury', *Concussion*, 2(1), p. CNC30. Available at: <https://doi.org/10.2217/cnc-2016-0022>.
- Winn, H. R. (2017). YOUMANS AND WINN NEUROLOGICAL SURGERY SEVENTH EDITION (seventh). Elsevier.

Yanes G. 2021. Pengaruh Paparan Trauma Listrik terhadap Ekspresi S100B Neuroglia pada Otak. **Thesis. Tidak Diterbitkan. Fakultas Kedokteran, Kesehatan Masyarakat dan Keperawatan Universitas Gadjah Mada: Yogyakarta**

Yiannopoulou, K.G. *et al.* (2021) ‘Neurological and neurourological complications of electrical injuries’, *Neurologia i Neurochirurgia Polska*, 55(1), pp. 12–23. Available at: <https://doi.org/10.5603/JNNS.a2020.0076>.

Zemaitis MR, Foris LA, Lopez RA, et al. (2020). Electrical Injuries. *StatPearls Publishing, Treasure Island (FL)*, 1–16. <https://www.ncbi.nlm.nih.gov/books/NBK448087/#!po=96.8750>

Zhang, B. *et al.* (2015) ‘Age decreases macrophage IL-10 expression: Implications for functional recovery and tissue repair in spinal cord injury’, *Experimental Neurology*, 273, pp. 83–91.