

**DAFTAR PUSTAKA**

- Agamanolis, D.P. 2013. Cerebral Ischemia And Stroke. *Neuropathology*.
- Aggarwal, A., Aggarwal, P., Khatak, M., Khatak, S. 2010. Cerebral Ischemic Stroke: Sequels Of Cascade. *International Journal of Pharma and Bio Sciences*, 1(3):1-24.
- Allbutt, H. N. and Henderson, J. M., 2007. Use of the narrow beam test in the rat, 6-hydroxydopamine model of Parkinson's disease. *Journal of Neuroscience Methods*, 159(2), pp. 195–202.
- Almpani, M., 2009. Neuroprotective effects of erythropoietin. 1, pp. 15–18.
- Aluclu, M.U., Acar, A., Guzel, A., Bahceci, S., Yaldiz, M. 2007. Evaluation of erythropoietin effects on cerebral ischemia in rats. *Neuroendocrinol Lett*. 28, pp. 170-174
- Balasubramanian, S. 2015. Motor impairments following stroke.p.15-16.
- Belayev, L., Khoutorova, L., Zhao, W., Vigdorchik, A., Belayev, A., Bustos, R., ... Ginsberg, M. D. 2005. Neuroprotective Effect of Darbepoetin Alfa, a Novel Recombinant Erythropoietic Protein, in Focal Cerebral Ischemia in Rats. *Stroke*, 36(5), 1065–1070.
- Benjamin, E. J., Virani, S. S., Callaway, C. W., Chamberlain, A. M., Chang, A. R., Cheng, S., ... Deo, R. 2018. Heart Disease and Stroke Statistics—2018 Update: A Report From the American Heart Association. *Circulation*, 137(12), e67–e492.
- Bertrand, L., Dygert, L., Toborek, M. 2017. Induction of Ischemic Stroke and Ischemia-reperfusion in Mice Using the Middle Artery Occlusion Technique and Visualization of Infarct Area. *Journal of Visualized Experiments*. 120, pp. 1-7.
- Bhatti, A. B., Ali F., and Satti, S. A. 2013. Association Of Obesity With

- Stroke. *International journal of biomedical research.* 4(8), pp. 422-426.
- Bland, S.T., Schallert, T., Strong, R., Aronowski, J., Grotta, J.C., Feeney, D.M. 2000. Early exclusive use of the affected forelimb after moderate transient focal ischemia in rats: functional and anatomic outcome editorial comment: functional and anatomic outcome. *Stroke,* 31:1144-1152.
- Bogoyevitch, M.A. 2004. An update on the cardiac effects of erythropoietin cardioprotection by erythropoietin and the lessons learnt from studies in neuroprotection. *Cardiovasc Res,* 63: 208–216.
- Bouet, V., Freret, T., Toutain, J., Divoux, D., Boulourard, M., Schumann-Bard, P. 2007. Sensorimotor and cognitive deficits after transient middle cerebral artery occlusion in the mouse. *Experimental Neurology,* 203:555-567.
- Bouet, V., Boulourard, M., Toutain, J., Divoux, D., Bernaudin, M., Schumann-Bard, P., & Freret, T. 2009. The adhesive removal test: a sensitive method to assess sensorimotor deficits in mice. *Nature Protocols,* 4(10), 1560–1564.
- Brines, M. and Cerami, A., 2008. Erythropoietin-mediated tissue protection: Reducing collateral damage from the primary injury response. *Journal of Internal Medicine,* 264(5), pp. 405–432.
- Broughton, B. R. S., Reutens, D. C., and Sobey, C. G. 2009. Apoptotic Mechanisms After Cerebral Ischemia. *Stroke,* 40(5), e331–e339.
- Cai, Z., Manalo, D.J., Wei, G., Rodriguez, E.R., Fox-Talbot, K., Lu, H., Zweier, J.L., Semenza, G.L. 2003. Hearts from rodents exposed to intermittent hypoxia or erythropoietin are protected against ischemiareperfusion injury. *Circulation,* 108: 79–85.

- Caplan, L.R. 2011. Etiology, Classification, and Epidemiology of Stroke.  
Htpp://www.uptodate.com [Accessed 10 September 2018]
- Cengic, L., Vulctic, V., Karlic, M., Dikanovic, M., Demarin, V. 2011.  
Motor and cognitive impairment after stroke. *Acta Clin Croat*,  
50: 463–467.
- Chang, Y.-L., Hung, S.-H., Ling, W., Lin, H.-C., Li, H.-C., and Chung, S.-D. 2013. Association between Ischemic Stroke and Iron-Deficiency Anemia: A Population-Based Study. *PLoS ONE*,  
8(12), e82952.
- Chen, J., Zhang, C., Jiang, H., Li, Y., Zhang, L., Robin, A., Katakowski, M., Lu, M., Chopp, M. 2005. Atorvastin induction of VEGF and BDNF promotes brain plasticity after stroke in mice. *Journal of Cerebral Blood Flow and Metabolism*, 25:281-290.
- Deicher, R., and Horl, H. 2004. Differentiating factors between erythropoiesis-stimulating agents. *Drugs*, 64:499–507.
- Diclcaygioglu, M., Bichet, S., Marti, H., 1995. Localization of Specific Erythropoietin Binding Sites in Defined Areas of The Mouse Brain. *Proc Natl Acad Sci*, pp.3717-3720.
- Ehrenreich, H., Hasselblatt, M., Dembowski, C., Cepek, L., Lewczuk, P., Stiefel, M. 2002. Erythropoietin therapy for acute stroke is both safe and beneficial. *Mol Med*, 8(3):495–505.
- Fandrey, J. 2004. Oxygen-dependent and tissue-specific regulation of erythropoietin gene expression. *American Journal of Physiology -Regulatory, Integrative and Comparative Physiology*,  
286(6),pp.R977-R988.
- Faure, S., Oudart, N., Javellaud, J., Fournier, A., Warnock, D. G., & Achard, J.-M. 2006. Synergistic protective effects of

- erythropoietin and olmesartan on ischemic stroke survival and post-stroke memory dysfunctions in the gerbil. *Journal of Hypertension*, 24(11), 2255–2261.
- Freret, T., Valable, S., Chazalviel, L., Saulnier, R., Mackenzie, E., Petit, E., Bernaudin, M., Boulovard, M., Schumann-Bard, P. 2006. Delayed administration of deferoxamine reduces brain damage and promotes functional recovery after transient focal cerebral ischemia in the rat. *European Journal of Neuroscience*, 23:1757-1765.
- Gan, Y., Xing, J., Jing, Z., Stetler, R. A., Zhang, F., Luo, Y., ... Cao, G. 2012. Mutant erythropoietin without erythropoietic activity is neuroprotective against ischemic brain injury. *Stroke*, 43(11), pp. 3071–3077.
- Gharbawie, O.A., Whishaw, P.A., Whishaw, I.Q. 2004. The topography of threedimensional exploration: a new quantification of vertical and horizontal exploration, postural support, and exploratory bouts in the cylinder test. *Behavioral Brain Research*, 151:125-135.
- Guo, Y., Li, P., Guo, Q., Shang, K., Yan, D., Du, S., & Lu, Y. 2013. Pathophysiology and Biomarkers in Acute Ischemic Stroke – A Review. *Tropical Journal of Pharmaceutical Research*, 12(6), pp. 1097-1105.
- Hernandez, T.D., Schallert, T. 1988. Seizures and recovery from experimental brain damage. *Exp Neurol*, 102:318.
- Hinkle J. L., and Guanci M. M., 2007. Acute Ischemic Stroke Review. *Journal Of Neuroscience Nursing*. 39(5), pp. 285-310.
- Hua, Y., Schallert, T., Keep, R.F., Wu, J., Hoff, J.T., Xi, G. 2002.

- Behavioral tests after intracerebral hemorrhage in the rat. *Stroke*, 33:2478-2484.
- Jansen. 2014. Eprex Intravenous & Subcutaneous Injection Product Information. *Trademark of Janssen-Cilag Pty Ltd*. Auckland New Zealand.
- Kanyal, N., 2015. The Science of Ischemic Stroke: Pathophysiology & Pharmacological Treatment. *International Journal of Pharma Research & Review*, 4(10), pp. 65–84.
- Khotib, J., Rahmadi, M., Mentari, I.K., Suharjono. 2019. Erythropoietin Potential as an Antiapoptotic Agent in ISCEMIC Stroke using Unilateral Right Common Carotid Artery Occlusion (RUCCAO) Model. *Indian Journal of Public Health Research and Development*, 10(4):1184.
- Kobayashi, T., Yanase, H., Iwanaga, T., Sasaki, R., Nagao, M. 2002. Epididymis is a novel site of erythropoietin production in mouse reproductive organs. *Biochem Biophys Res Commun*, 296: 145–151.
- Kuraoka, M., Furuta, T., Matsuwaki, T., Omatsu, T., Ishii, Y., Kyuwa, S., Yoshikawa, Y., 2009. Direct Experimental Occlusion of the Distal Middle Cerebral Artery Induces High Reproducibility of Brain Ischemia in Mice. *Exp.Anm*; 58(1), pp. 19-29.
- Liu, G., Wang, T., Wang, T., Song, J., and Zhou, Z. 2013. Effects of apoptosis-related proteins caspase-3, Bax and Bcl-2 on cerebral ischemia rats. *Biomedical Reports*, pp. 861–867.
- Luong, T. N., Carlisle, H. J., Southwell, A., Patterson, P. H.. 2011. Assessment of Motor Balance and Coordination in Mice using the Balance Beam. *Journal of Visualized Experiments*, (49), pp.

5–7.

- Mancini, D. M., and Kunavarapu, C. 2003. Effect of erythropoietin on exercise capacity in anemic patients with advanced heart failure. *Kidney International*, 64, S48–S52.
- Markgraf, C.G., Green, E.J., Hurwitz, B.E., Morikawa, E., Dietrich, W.D., McCabe, P.M., Ginsberg, M.D., Schneiderman, N. 1992. Sensorimotor and cognitive consequences of middle cerebral artery occlusion in rats. *Brain Research*, 575:238-246.
- Marti, H.H., Wenger, R.H., Rivas, L.A., Straumann, U., Digicaylioglu, M., Henn, V., Yonekawa, Y., Bauer, C., Gassmann, M. 1996. Erythropoietin gene expression in human, monkey and murine brain. *Eur J Neurosci*, 8: 666–676.
- Mass, M. B., and Safdieh, J. 2009. Ischemic Stroke: Pathophysiology And Principles Of Localization. *Hospital Physician Neurology Board Review Manual Wayne*, 13(1):1-16.
- Masuda, S., Kobayashi, T., Chikuma, M., Nagao, M., Sasaki, R. 2002. The oviduct produces erythropoietin in an estrogen- and oxygen-dependent manner. *Am J Physiol Endocrinol Metab*, 278: E1038–E1044.
- Mentari, I. K., Naufalina, R., Rahmadi, M., Khotib, J. 2018. Development of Ischemic Stroke Model by Right Unilateral Common Carotid Artery Occlusion (RUCCAO) Method. *Fol Med Indones*, 54, pp.200-206.
- Metz, G. A. and Whishaw, I. Q. 2002. Cortical and subcortical lesions impair skilled walking in the ladder rung walking test: a new task to evaluate fore- and hindlimb stepping, placing, and coordination. *Journal of Neuroscience Methods*, 115, pp. 169–

179.

- Metz, G. A. and Whishaw, I. Q., 2009. The Ladder Rung Walking Task: A Scoring System and its Practical Application. *Journal of Visualized Experiments*, (28), pp. 4–7.
- Ng, T., Marx, G., Littlewood, T., Macdougall, I. 2003. Recombinant erythropoietin in clinical practice. *Postgraduate Medical Journal*, 79, pp. 367–377.
- Osama, A. K., Aziz. A. A., Saeed, J., Fawzy, M.S. 2014. Thyroid Dysfunction in Acute Ischemic Stroke in Medical Intensive Care Unit in Zagazig University Hospitals. *International Journal of Advanced Research*, 2 (7):385-391.
- Parsa, C.J., Matsumoto, A., Kim, J., Riel, R.U., Pascal, L.S., Walton, G.B., Thompson, R.B., Petrofski, J.A., Annex, B.H., Stamler, J.S., Koch, W.J. 2003. A novel protective effect of erythropoietin in the infarcted heart. *J Clin Invest*, 112: 999–1007.
- Paschos, N., Lykissas, M. G. dan Beris, A. E., 2008. The role of erythropoietin as an inhibitor of tissue ischemia. *International Journal of Biological Sciences*, 4(3), pp. 161–168.
- Patel, N.S., Sharples, E.J., Cuzzocrea, S., Chatterjee, P.K., Britti, D., Yaqoob, M.M., Thiemermann, C. 2004. Pretreatment with EPO reduces the injury and dysfunction caused by ischemia/reperfusion in the mouse kidney in vivo. *Kidney Int*, 66: 983–989.
- Ponce, L. L., Navarro, J. C., Ahmed, O., & Robertson, C. S. 2013. Erythropoietin neuroprotection with traumatic brain injury. *Pathophysiology*, 20(1), pp. 31–38.
- Price, Sylvia A., Lorraine, M. Wilson. 2006. Patofisiologi Konsep Klinis

- Proses-Proses Penyakit. *Penerbit Buku Kedokteran EGC*. Jakarta p 1113-1116.
- Rabie, T. and Marti, H. H. 2008. Brain Protection by Erythropoietin : A Manifold Task. *Physiology*, 23, pp. 263–274.
- Raskob, G.E. 2014. Thrombosis: A Major Contributor To The Global Disease Burden. *Journal of Thrombosis and Haemostasis*, 12:1580-1590.
- REED, D. M. 1990. THE PARADOX OF HIGH RISK OF STROKE IN POPULATION WITH LOW RISK OF CORONARY HEART DISEASE. *American Journal of Epidemiology*, 131(4), 579–588.
- Rewell, S. S. J., Churilov, L., Sidon, T. K., Aleksoska, E., Cox, S. F., Macleod, M. R., & Howells, D. W. 2017. Evolution of ischemic damage and behavioural deficit over 6 months after MCAo in the rat: Selecting the optimal outcomes and statistical power for multi-centre preclinical trials. *PLoS ONE*, 12(2), pp. 1–19.
- Riek-Burchardt, M., Henrich-Noack, P., Metz, G. A., & Reymann, K. G. (2004). Detection of chronic sensorimotor impairments in the ladder rung walking task in rats with endothelin-1-induced mild focal ischemia. *Journal of Neuroscience Methods*, 137(2), 227–233.
- Rogers, D.C., Campbell, C.A., Stretton, J.L., Mackay, K.B. 1997. Correlation between motor impairment and infarct volume after permanent and transient middle cerebral artery occlusion in the rat. *Stroke*, 28:2060-2065.
- Schaar, K. L., Brenneman, M. M. dan Savitz, S. I., 2010. Functional assessments in the rodent stroke model. *Experimental and*

- Translational Stroke Medicine*, 2(1), pp. 1–11.
- Schallert, T., Woodlee, M.T. 2005. Orienting and placing. In the Behavior of the Laboratory Rat: A Handbook with Tests Oxford: Oxford University PressWhishaw I, **Kolb B**, 129-140.
- Schellinger, P. D., Bryan, R. N., Caplan, L. R., Detre, J. A., Edelman, R. R., Jaigobin, C., Kidwell, C. S., Mohr, J. P., Sloan, M., Sorensen, A. G., Warach, S. 2010. The role of diffusion and perfusion MRI for the diagnosis of acute ischemic stroke. *AAN*, 75:177-185.
- Schrier, R.W. 2007. Diseases of The Kidney and Urinary Tract. 8 th edition. Volume III. p. 1894-1905, 2405-2423.
- Shamas, M.N. 2011. Clinical and Complication Profile of Geriatric Patients with Acute Ischemic Stroke. *International Journal Of Health Science And Research*, 01(01).
- Siren, A.L., Fabhauer, T., Bartel, C., Ehrenreich, H. 2009. Therapeutic potential of erythropoietin and its structural or functional variants in the nervous system. *J Am Soc Exp Neurother*, 6:108–27.
- Smeltzer S. C., O'Connell, S. C., Brenda, B. G, Hinkle, Janice L., Cheever, Kerry H. 2010. Brunner & Suddarth's Textbook of Medical-surgical Nursing, Volume 1, pg 1897-1899.
- Sofia, P., Bisri, T., Wargahadibrata, A.H. 2005. Effect neuroprotector epoetin alfa after brain trauma: a histopathology brain rats study. *Anesth Crit Care*, 23(3):203–13.
- Stankowski J N, and Gupta R. 2011. Therapeutic Targets for Neuroprotection in Acute Ischemic Stroke: Lost in Translation?Antioxidant & Redox Signaling. 14(10), pp. 1841–1851.
- Stoll G, Kleinschnitz C, Nieswandt B. 2008. Molecular Mechanisms of

- Thrombus Formation In Ischemic Stroke: Novel Insights And Targets For Treatment. *Blood*. 112(9):3555-3562.
- Traystman, R. J., 2003. Animal models of focal and global cerebral ischemia. *ILAR Journal*, 44(2), pp. 85–95.
- Weiss, M. J. 2003. New Insights Into Erythropoietin and Epoetin Alfa: Mechanisms of Action, Target Tissues, and Clinical Applications. *The Oncologist*, 8(90003), 18–29.
- World Health Organization. 2006. STEP Stroke Surveillance. Available from :  
[http://www.who.int/entity/chp/steps/Section1\\_Introduction.pdf](http://www.who.int/entity/chp/steps/Section1_Introduction.pdf)[Accessed 26 Oktober 2018]
- Yoshizaki, K., Adachi, K., Kataoka, S., Watanabe, A., Tabira, T., Takahashi, K., & Wakita, H. 2008. Chronic cerebral hypoperfusion induced by right unilateral common carotid artery occlusion causes delayed white matter lesions and cognitive impairment in adult mice. *Experimental Neurology*, 210(2), pp. 585–591.
- Zandieh, A., Kahaki, Z. Z., Sadeghian, H., Fakhri, M., Pourashraf, M., Parviz, S., ... Ghabae, M. 2013. A simple risk score for early ischemic stroke mortality derived from National Institutes of Health Stroke Scale: A discriminant analysis. *Clinical Neurology and Neurosurgery*, 115:1036–1039.
- Zhang, L., Schallert, T., Zhang, Z.G., Jiang, Q., Arniego, P., Li, Q., Lu, M., Chopp, M. 2002. A test for detecting long-term sensorimotor dysfunction in the mouse after focal cerebral ischemia. *Journal of Neuroscience Methods*, 117:207-214.