DAFTAR PUSTAKA

Fluri F, Schuhmann MK, Kleinschnitz C. Animal models of ischemic stroke and their application in clinical research. Drug Des Devel Ther. 2015;9(December):3445-3454. doi:10.2147/DDDT.S56071.

Bacigaluppi M, Comi G, Hermann DM. Animal models of ischemic stroke. Part two:modeling cerebral ischemia. Open Neurol J. 2010;4:34-38. doi:10.2174/1874205X01004020034.

Van der Worp HB, Sena ES, Donnan GA, Howells DW, Macleod MR. Hypothermia in animal models of acute ischaemic stroke: a systematic review and meta-analysis. Brain. 2007;130(12):3063-3074. doi:10.1093/brain/awm083.

Cai M, Ma Y, Zhang W, et al. Apigenin-7- O - β -D-(-6''- p -coumaroyl)-Glucopyranoside Treatment Elicits Neuroprotective Effect against Experimental Ischemic Stroke. Int J Biol Sci. 2016;12(1):42-52. doi:10.7150/ijbs.12275.

Herson PS, Traystman RJ. Animal models of stroke: translational potential at present and in 2050. Future Neurol. 2014;9(5):541-551. doi:10.2217/fnl.14.44.

Wang G, Zhang J, Hu X, et al. Microglia / macrophage polarization dynamics in white matter after traumatic brain injury. 2013;33(12):1864-1874. doi:10.1038/jcbfm.2013.146.

Peferoen L, Kipp M, Valk P Van Der, Johannes M. Oligodendrocyte-microglia cross-talk in the central nervous system. 2014:302-313. doi:10.1111/imm.12163.

Sturrock RR. Light microscopic identification of immature glial cells in semithinsections of the developing mouse corpus callosum. 1976:521-537.

Manuscript A. NIH Public Access. 2012;31(33):11914-11928. doi:10.1523/JNEUROSCI.1759-11.2011.Macroglial.

Bush TG, Puvanachandra N, Horner CH, et al. Leukocyte Infiltration , Neuronal Degeneration , and Neurite Outgrowth after Ablation of Scar-Forming , Reactive Astrocytes in Adult Transgenic Mice. 1999;23:297-308.

Faulkner JR, Herrmann JE, Woo MJ, Tansey KE, Doan NB, Sofroniew M V. Reactive Astrocytes Protect Tissue and Preserve Function after Spinal Cord Injury. 2004;24(9):2143-2155. doi:10.1523/JNEUROSCI.3547-03.2004.

Myer DJ, Gurkoff GG, Lee SM, Hovda DA, Sofroniew M V. Essential protective roles of reactive astrocytes in traumatic brain injury. 2006:2761-2772. doi:10.1093/brain/awl165.

Epstein JB, Scully C, Spinelli J. Toluidine blue and Lugol's iodine application in the assessment of oral malignant disease and lesions at risk of malignancy. J Oral Pathol Med. 1992;21:160–3. [PubMed]

Epstein JB, Oakley C, Millner A, Emerton S, van der Meij E, Le N. The utility of toluidine blue application as a diagnostic aid in patients previously treated for upper oropharyngeal carcinoma. Oral Surg Oral Med Oral Pathol Oral Radiol Endod. 1997;83:537–47. [PubMed]

Gandalfo S, Pentenero M, Broccoletti R, Pagano M, Carrozzo M, Scully C. Toluidine blue uptake in potentially malignant lesions in vivo: Clinical and histological assessment. Oral Oncol. 2006;42:89–95. [PubMed].

Griffin, R, Illia, L. S. & Mitchell, J.. (1972). Identification of neuroglia by light and electronmicroscopy. Acta neuropathologica 22, 7-12.

Voskuhl RR, Peterson RS, Song B, Ao Y, Morales LB, Tiwari-Woodruff S, Sofroniew MV. Reactive astrocytes form scar-like perivascular barriers to leukocytes during adaptive immune inflammation of the CNS. J Neurosci. 2009; 29:11511–11522. [PubMed: 19759299]

Farina C, Aloisi F, Meinl E (2007) Astrocytes are active players in cerebral innate immunity. Trends Immunol 28:138–145. CrossRefPubMedGoogle Scholar

O'Callaghan J. P., Sriram K. (2005). Glial fibrillary acidic protein and related glial proteins as biomarkers of neurotoxicity. Expert Opin. Drug Saf. 4, 433–442. [PubMed]

Araque A, Navarrete M (2011) electrically driven insulation in the central nervous system. Science 333: 1587-1588.

Wang, J., 2010. Preclinical and clinical research on inflammation after intracerebral hemorrhage. Prog. Neurobiol. 92, 463–477.

Magnusson, J.P., Goritz, C., Tatarishvili, J., Dias, D.O., Smith, E.M., Lindvall, O., Kokaia, Z., Frisen, J., 2014. A latent neurogenic program in astrocytes regulated by Notch signaling in the mouse. Science 346, 237–241

Ruan, L., Wang, B., ZhuGe, Q., Jin, K., 2015. Coupling of neurogenesis and angiogenesis after ischemic stroke. Brain Res. 1623, 166–173.

Gokul Sridharan , Akhil A Shankar. Toluidine blue: A review of its chemistry and clinical utility. J Oral Maxillofac Pathol 2012;16(2):251-255.

C. F. Poh, C. E. MacAulay, D. M. Laronde, P. M. Williams, L. Zhang, and M. P. Rosin, "Squamous cell carcinoma and precursor lesions: diagnosis and screening in a technical era," Periodontol. 2000 57(1), 73–88 (2011). [CrossRef] [PubMed]

Akira S, Takeda K. Toll-like receptor signalling. Nat Rev Immunol.2004;4:499–511. [PubMed]

Okun E, Griffioen KJ, Mattson MP 2011. Toll-like receptor signaling in neural plasticity and disease. Trends Neurosci 34: 269–281 [PMC free article][PubMed]

Fan W, Dai Y, Xu H, et al. Caspase-3 modulates regenerative response after stroke. Stem Cells. 2014;32:473–486. doi: 10.1002/stem.1503. [PubMed][Cross Ref]

Ekdahl CT, Claasen JH, Bonde S, Kokaia Z, Lindvall O (2003) Inflammation is detrimental for neurogenesis in adult brain. Proc Natl Acad Sci USA 100:13632–13637. Abstract/FREE Full Text Google Scholar

Arvidsson A, Kokaia Z, Lindvall O (2001) N-methyl-Daspartate receptor-mediated increase of neurogenesis in adult rat dentate gyrus following stroke. Eur J Neurosci 14: 10–18.

Xiong, X., Liu, L. & Yang, Q., 2016. Progress in Neurobiology Functions and mechanisms of microglia / macrophages in neuroin fl ammation and neurogenesis after stroke. *Progress in Neurobiology*, 142, pp.23–44. Available at: http://dx.doi.org/10.1016/j.pneurobio.2016.05.001.

Otero L, Zurita M, Bonilla C, Rico MA, Aguayo C, Rodriguez Z, Vaquero J (2012) Endogenous neurogenesis after intracerebral hemorrhage. Histol Histopathol 27:303–315.

Hu X, Leak RK, Shi Y, Suenaga J, Gao Y, Zheng P, et al. (2015). Microglial and macrophage polarization-new prospects for brain repair. Nat Rev Neurol 11: 56–64.

Arumugam, T.V., Chan, S.L., Jo, D.G., Yilmaz, G., Tang, S.C., Cheng, A., Gleichmann, M., Okun, E., Dixit, V.D., Chigurupati, S., Mughal, M.R., Ouyang, X., Miele, L., Magnus, T., Poosala, S., Granger, D.N., Mattson, M.P., 2006. Gamma secretase-mediated Notch signaling worsens brain damage and functional outcome in ischemic stroke. Nat. Med. 12, 621–623.

Baik, S.H., Fane, M., Park, J.H., Cheng, Y.L., Yang-Wei Fann, D., Yun, U.J., Choi, Y., Park, J. S., Chai, B.H., Back, S.H., Jeong, J.I., Jang, Y.J., Bahn, G., Lee, J.Y., Li, Y.I., Sobey, C.G., Uchida, T., Kim, H.T., Tang, S.C., Arumugam, T.V., Jo, D.G., 2015. Pin1 promotes neuronal death in stroke by stabilizing Notch intracellular domain. Ann. Neurol. 77, 504–516.

Wei, Z., Chigurupati, S., Arumugam, T.V., Jo, D.G., Li, H., Chan, S.L., 2011b. Notch activation enhances the microglia-mediated inflammatory response associated with focal cerebral ischemia. Stroke 42, 2589–2594.

Yao, L., Cao, Q., Wu, C., Kaur, C., Hao, A., Ling, E.A., 2013a. Notch signaling in the central nervous system with special reference to its expression in microglia. CNS Neurol. Disord. Drug Targets 12, 807–814.

Yuan, Y., Rangarajan, P., Kan, E.M., Wu, Y., Wu, C., Ling, E.A., 2015. Scutellarin regulates the Notch pathway and affects the migration and morphological transformation of activated microglia in experimentally induced cerebral ischemia in rats and in activated BV-2 microglia. J. Neuroinflammation 12, 11.

Beutler, B.A., 2009. TLRs and innate immunity. Blood 113, 1399–1407.

Kawasaki, T., Kawai, T., 2014. Toll-like receptor signaling pathways. Front. Immunol. 5, 461.

Kong Y., Le Y. (2011). Toll-like receptors in inflammation of the central nervous system. Int. Immunopharmacol. 11,1407–1414. 10.1016/j.intimp.2011.04.025 [PubMed] [Cross Ref]

Brea, D., Blanco, M., Ramos-Cabrer, P., Moldes, O., Arias, S., Perez-Mato, M., Leira, R., Sobrino, T., Castillo, J., 2011a. Toll-like receptors 2 and 4 in ischemic stroke: outcome and therapeutic values. J. Cereb. Blood Flow Metab. 31, 1424–1431.

Kwon, M.S., Woo, S.K., Kurland, D.B., Yoon, S.H., Palmer, A.F., Banerjee, U., Iqbal, S., Ivanova, S., Gerzanich, V., Simard, J.M., 2015. Methemoglobin is an endogenous toll-like receptor 4 ligand-relevance to subarachnoid hemorrhage. Int. J. Mol. Sci. 16, 5028–5046.

Lin, S., Yin, Q., Zhong, Q., Lv, F.L., Zhou, Y., Li, J.Q., Wang, J.Z., Su, B.Y., Yang, Q.W., 2012. Heme activates TLR4-mediated inflammatory injury via MyD88/TRIF signaling pathway in intracerebral hemorrhage. J. Neuroinflammation 9, 46.

Wang, Y.C., Zhou, Y., Fang, H., Lin, S., Wang, P.F., Xiong, R.P., Chen, J., Xiong, X.Y., Lv, F. L., Liang, Q.L., Yang, Q.W., 2014c. Toll-like receptor 2/4 heterodimer mediates inflammatory injury in intracerebral hemorrhage. Ann. Neurol. 75, 876–889.

Clausen, B.H., Lambertsen, K.L., Babcock, A.A., Holm, T.H., Dagnaes-Hansen, F., Finsen, B., 2008. Interleukin-1beta and tumor necrosis factor-alpha are expressed by different

subsets of microglia and macrophages after ischemic stroke in mice. J. Neuroinflammation 5, 46.

Lambertsen, K.L., Biber, K., Finsen, B., 2012. Inflammatory cytokines in experimental and human stroke. J. Cereb. Blood Flow Metab. 32, 1677–1698.

Tomimoto, H., Akiguchi, I., Wakita, H., Kinoshita, A., Ikemoto, A., Nakamura, S., Kimura, J., 1996. Glial expression of cytokines in the brains of cerebrovascular disease patients. Acta Neuropathol. 92, 281–287.

Zhou, Y., Wang, Y.C., Wang, J., Stetler, R.A., Yang, Q.W., 2014. Inflammation in intracerebral hemorrhage: from mechanisms to clinical translation. Prog. Neurobiol. 115, 25–44.

Araya R, Kudo M, Kawano M, Ishii K, Hashikawa T, Iwasato T,Itohara S, Terasaki T, Oohira A, Mishina Y, Yamada M (2008)BMP signaling through BMPRIA in astrocytes is essential forproper cerebral angiogenesis and formation of the blood-brainbarrier. Mol Cell Neurosci 38:417–430

Mehta, S. L., Manhas, N., & Raghubir, R. (2007). Molecular targets in cerebral ischemia for developing novel therapeutics ☆, *4*. http://doi.org/10.1016/j.brainresrev.2006.11.003

Hong, S.J., Dawson, T.M., Dawson, V.L., 2004. Nuclear and mitochondrial conversations in cell death: PARP-1 and AIF signaling. Trends Pharmacol. Sci. 25, 259–264.

Alex,O., Akinrinmade., 2015. Potential neuroprotective effects of fermented rooibos herbal tea in a rat model of ischemic brain injury By Supervisor :, (May). http://hdl.handle.net/11394/4705 [diakses tanggal 28 Agustus 2016]

Khallout, K.B.A., 2013. Cerebral Hypoperfusion In The Rat And Its Consequences. Doctor of Philosophy, The University of Edinburgh.

Abrahám H, Lázár G (2000) Early microglial reaction following mild forebrain ischemia induced by common carotid artery occulusion in rats. *Brain Res* 862: 63–73 CrossRef, PubMed

Sugawara, T. et al., 2002. Effects of Global Ischemia Duration on Neuronal, Astroglial, Oligodendroglial, and Microglial Reactions in the Vulnerable Hippocampal CA1 Subregion in Rats. , 19(1).

Voskuhl, R.R. et al., 2009. NIH Public Access. , 29(37), pp.11511–11522.

Galou, M. et al., 1996. Disrupted Glial Fibrillary Acidic Protein Network in Astrocytes from Vimentin Knockout Mice. , 133(4), pp.853–863.Microglia in central nervous system

repair after injury.

Jin, X.. Yamashita. T., 2016. Microglia in central nervous system repair after injury. 159 (5): 491-496

Gomes-leal, W., 2012. Microglial physiopathology : how to explain the dual role of microglia after acute neural disorders ? , pp.345–356.

Nimmerjahn A, Kirchhoff F, Helmchen F (2005) Resting microglial cells are highly dynamic surveillants of brain parenchyma in vivo. Science 308, 1314–1318.

Torres-Platas S. G., Comeau S., Rachalski A., Bo G. D., Cruceanu C., Turecki G., et al. (2014).Morphometric characterization of microglial phenotypes in human cerebral cortex. *J. Neuroinflammation*11 12 10.1186/1742-2094-11-12 [PMC freearticle] [PubMed] [Cross Ref]

Zhao X., Sun G., Zhang J., Strong R., Song W., Gonzales N., et al. . (2007). Hematoma resolution as a target for intracerebral hemorrhage treatment: role for peroxisome proliferator-activated receptor gamma in microglia/macrophages. Ann.Neurol. 61,352–362.10.1002/ana.21097 [PubMed] [Cross Ref]

Michell-Robinson MA, Touil H, Healy LM, Owen DR, Durafourt BA, Bar-Or A, Antel JP, Moore CS. Roles of microglia in brain development, tissue maintenance and repair. Brain. 2015;138:1138–1159.[PubMed]

Cunningham, C., 2013. Microglia and neurodegeneration: the role of systemic inflammation. Glia 61, 71–90.

d'Avila, J.C., Lam, T.I., Bingham, D., Shi, J., Won, S.J., Kauppinen, T.M., Massa, S., Liu, J., Swanson, R.A., 2012. Microglial activation induced by brain trauma is suppressed by post-injury treatment with a PARP inhibitor. J. Neuroinflammation 9, 31.

Müller, A., Brandenburg, S., Turkowski, K., Müller, S., Vajkoczy, P., 2015. Resident microglia, and not peripheral macrophages, are the main source of brain tumor mononuclear cells. Int. J. Cancer 137, 278–288.

Taylor, R.A., Sansing, L.H., 2013. Microglial responses after ischemic stroke and intracerebral hemorrhage. Clin. Dev. Immunol. 2013, 746068.

Nolte, C., Möller, T., Walter, T., Kettenmann, H., 1996. Complement 5a controls motility of murine microglial cells in vitro via activation of an inhibitory G-protein and the rearrangement of the actin cytoskeleton. Neuroscience 73, 1091–1107.

Stence, N., Waite, M., Dailey, M.E., 2001. Dynamics of microglial activation: a confocal time-lapse analysis in hippocampal slices. Glia 33, 256–266.

Graeber, M.B., Streit, W.J., 2010. Microglia: biology and pathology. Acta Neuropathol. 119, 89–105.

Ginhoux, F., Greter, M., Leboeuf, M., Nandi, S., See, P., Gokhan, S., Mehler, M.F., Conway, S.J., Ng, L.G., Stanley, E.R., 2010. Fate mapping analysis reveals that adult microglia derive from primitive macrophages. Science 330, 841–845.

Sylvia S. Mader, Biology, 7th Edition, Mc Graw Hall Boston (1996) , s 381 pages, Hanisch, U.K., Kettenmann, H., 2007. Microglia: active sensor and versatile effector cells in the normal and pathologic brain. Nat. Neurosci. 10, 1387–1394

Smith, J.A., Das, A., Ray, S.K., Banik, N.L., 2012. Role of pro-inflammatory cytokines released from microglia in neurodegenerative diseases. Brain Res. Bull. 87, 10– 20.

Ekdahl, C.T., Claasen, J.H., Bonde, S., Kokaia, Z., Lindvall, O., 2003. Inflammation is detrimental for neurogenesis in adult brain. Proc. Natl. Acad. Sci. U. S. A. 100, 13632–13637.

Jolivel, V., Bicker, F., Binamé, F., Ploen, R., Keller, S., Gollan, R., Jurek, B., Birkenstock, J., Poisa-Beiro, L., Bruttger, J., 2015. Perivascular microglia promote blood vessel disintegration in the ischemic penumbra. Acta Neuropathol. 129, 279–295.

Masuda, T., Croom, D., Hida, H., Kirov, S.A., 2011. Capillary blood flow around microglial somata determines dynamics of microglial processes in ischemic conditions. Glia 59, 1744–1753.

Gyoneva, S., Orr, A.G., Traynelis, S.F., 2009. Differential regulation of microglial motility by ATP/ADP and adenosine. Parkinsonism Relat. Disord. 15 (Suppl 3), S195–199.

Dunn, A.K., Bolay, H., Moskowitz, M.A., Boas, D.A., 2001. Dynamic imaging of cerebral blood flow using laser speckle. J. Cereb. Blood Flow Metab. 21, 195–201.

Davalos, D., Grutzendler, J., Yang, G., Kim, J.V., Zuo, Y., Jung, S., Littman, D.R., Dustin, M.L., Gan, W.B., 2005. ATP mediates rapid microglial response to local brain injury in vivo. Nat. Neurosci. 8, 752–758.

Martins-Ferreira H, Nedergaard M, Nicholson C. Perspectives on spreading depression. Brain Res Rev.2000;32:215–234. [PubMed]

Busch E, Gyngell ML, Eis M, Hoehn-Berlage M, Hossmann KA. Potassium-induced cortical spreading depressions during focal cerebral ischemia in rats: contribution to lesion growth assessed by diffusion-weighted NMR and biochemical imaging. J Cereb Blood Flow Metab. 1996;16:1090–1099. [PubMed]

Nanri M, Watanabe H. [Availability of 2VO rats as a model for chronic cerebrovascular disease] Nihon Yakurigaku Zasshi. 1999;113(2):85–95. [PubMed]