



## DAFTAR PUSTAKA

- Abdelgawad, E.A., Mounir, S.M., Abdelhay, M.M., Ameen, M.A., 2021. Magnetic resonance imaging (MRI) volumetry in children with non-lesional epilepsy, does it help. *Egyptian Journal of Radiology and Nuclear Medicine*;52:35. <https://doi.org/10.1186/s43055-021-00409-0>.
- AbuHasan, Q., Reddy, V., Siddiqui, W., 2020. Neuroanatomy, Amygdala. StatPearls Publishing; Treasure Island (FL). Retrieved from <https://www.ncbi.nlm.nih.gov/books/NBK482171/>
- Bhalla, D., Godet, B., Druet-Cabanac, M., Preux, P.M, 2011. Etiologies of epilepsy: a comprehensive review. *Expert Review Neurotherapy*;11(6):861-876.
- Brandenburg, S., Hippocampus. Retrieved from: <https://www.pinterest.com/pin/54958057929864404/>
- CDC. 2020. *Epilepsy Data and Statistics*. Centers for Disease Control and Prevention. Retrieved from <https://www.cdc.gov/epilepsy/data/index.html>.
- Chadwick, D. 1990. *Diagnosis of Epilepsy*. Lancet;336(8710):291-295. doi:10.1016/0140-6736(90)91815-r.
- Chen, J., Ye, H., Zhang, J., Li, A., Ni, Y., 2022. Pathogenesis of seizures and epilepsy after stroke. *Acta Epileptologica*;4(2). doi:10.1186/s42494-021-00068-8.
- Dahlan, M.S., 2009. *Besar Sampel dalam Penelitian Kedokteran dan Kesehatan*, 4th Edition. Salemba Medika, Jakarta. 281-287.
- Daniel, S.W., 2014. *Neuroanatomi Klinis. Buku Kedokteran EGC*. Edisi 2. EGC, Jakarta.
- Delion, M., Dinomais, M., Mercier, P., 2017. Arteries and Veins of the Cerebellum. *Cerebellum*;16(5-6):880-912. doi:10.1007/s12311-016-0828-3.
- Engel, J., Pedley, et al., 2008. Introduction: What Is Epilepsy. In Engel J, Pedley TA. *Epilepsy-A Comprehensive Textbook* 2nd Ed. Vol One. Philadelphia: Lippincott Williams & Wilkins.
- Engelborghs, S., D'Hooge, R., 2000. Pathophysiology of epilepsy. *Acta neurology belgia*. 100:201-213.



- Farid, N., Girard, H. M., Kemmotsu, N., Smith, M. E. Magda, S. W., Lim, W. Y., *et al.*, 2012. Temporal Lobe Epilepsy: Quantitative MR Volumetry in Detection of Hippocampal Atrophy. *Radiological Society of North America*;265(2):542-550. doi:10.1148/radiol.12112638.
- Fisher, R.S., Cross, J.H., French, J.A., Higurashi, N., Hirsch, E., Jansen, F.E., et al., 2017. Operational classification of seizure types by the the International League Against Epilepsy: Position Paper of the ILAE Commission for Classification and Terminology. *Epilepsia*;1-9. doi: 10.1111/epi.13670.
- Frisoni, G.B., Fox, N.C., Jack, C.R., Scheltens, P. & Thompson, P.M. 2010. The clinical use of structural MRI in Alzheimer disease. *Nature Reviews Neurology*;6(2):67–77.
- Galovic, M., Atuesta, C.F., Abraira, L., Dohler, N., Sinka, L., Brigo, F., *et al.*, 2021. Seizures and Epilepsy After Stroke: Epidemiology, Biomarkers, and Management. *Review Article Drugs & Aging*;38(3):285-299. doi.org: 10.1007/s40266-021-00837-7.
- Giavarina, D., 2015. Understanding Bland Altman analysis. *Biochemia Medica*;25(2):141-151. doi:10.11613/BM.2015.015.
- Giorgio, A., De Stefano, N., 2013. Clinical use of brain volumetry. *Journal of Magnetic Resonance Imaging*;37:1-14. doi:10.1002/jmri.23671.
- Guyton, A.C., Hall, J.E., 2006. *Textbook of Medical Physiology*. 11th ed. USA: Elsevier Saunders.
- Hassani, M., Cooray, G., Sveinsson, O., Cooray, C., 2019. Post-stroke epilepsy in an ischemic stroke cohort-Incidence and diagnosis. *Acta Neurologica Scandinavica*. doi:10.1111/ane.13174.
- Hesdorffer, D.C., Benn, E.K.T., Cascino, G.D., Hauser, W.A., 2009. Is a first acute symptomatic seizure epilepsy? Mortality and risk for recurrent seizure. *Epilepsia*;50(5):1102-1108. doi:10.1111/j.1528-1167.2008.01945.
- Hu, Y., Shan, Y., Du, Q., Ding, Y., Shen, C., Wang, S., *et al.*, 2021. Gender and Sosioeconomic Disparities in Global Burden of Epilepsy: An Analysis of Time Trends From 1990 to 2017. *Frontiers in Neurology*;12:1-10. doi:10.3389/fneur.2021.643450.



- Hui, A.C., Kwan, P., 2004. Epidemiology and management of epilepsy in Hong Kong: an overview. *Seizure* 2004;13: 244-246. doi:10.1016/S1059-1311(03)00186-9.
- Ikawati, Z. 2011. *Farmakoterapi Penyakit Sistem Syaraf Pusat*. Cetakan Ketiga. Bursa Ilmu, Yogyakarta. hlm 85-102.
- Ismail, R., Eltomey, M., Mahdy, A., Elkattan, A., 2017. Hippocampal volumetric variations in the normal human brain by magnetic resonance imaging (MRI). *International Journal of Anatomical Variations*; 10(3):33-36.
- Jackson, G., Paesschen, W. V., 2002. Hippocampal Sclerosis in the MR Era. *Epilepsia*;43(1):4-10. Retrieved from [https://www.academia.edu/es/71939863/Hippocampal\\_Sclerosis\\_in\\_the\\_MR\\_Era](https://www.academia.edu/es/71939863/Hippocampal_Sclerosis_in_the_MR_Era).
- Keihaninejad, S., Heckemann, R.A., Gousias, I.S., Aljabar, P., Hajnal, J.V., Rueckert, D., et al., 2010. Automatic Volumetry Can Reveal Visually Undetected Disease Features on Brain MR Images in Temporal Lobe Epilepsy. *Proceedings/ IEEE International Symposium on Biomedical Imaging*. doi:10.1109/ISBI/2010.5490402.
- Kishk, N., Mourad, H., Ibrahim, S., Shamloul, R., Al-Azazi, A., Shalaby, N., 2019. Sex differences among epileptic patients: a comparison of epilepsy and its impacts on demographic features, clinical characteristics, and management patterns in a tertiary care hospital in Egypt. *The Egyptian Journal of Neurology, Psychiatry and Neurosurgery*;55(39). doi:10.1186/s41983-019-0078-7.
- Kizilirmak, J.M., Schott, B.H., Thuerich, H., Sweeney-Reed, C.M., Richter, A., Folta-Schoofs, K., et al., 2019. A Learning of novel semantic relationships via sudden comprehension is associated with a hippocampus-independent network. *Conscious and Cognition*;69:113-132. <https://doi.org/10.1016/j.concog.2019.01.005>.
- Kuzniecky, R.I., 2005. Neuroimaging of Epilepsy: Therapeutic Implications. *NeuroRx: The Journal of the American Society for Experimental NeuroTherapeutics*;2(2):384-93.



- Kusumastuti, K., Gunadharma, S., Kustiwati, E., 2014. *Pedoman Tatalaksana Epilepsi*, Ed 5. Kelompok Studi Epilepsi Perhimpunan Dokter Spesialis Saraf Indonesia (PERDOSSI). Airlangga University Press, Surabaya.
- Lawson, J.A., Vogrin, S., Bleasel, A.F., Cook, M.J., Bye, A.M.E., 2000. Cerebral and Cerebellar Volume Reduction in Children with Intractable Epilepsy. *Clinical Research Epilepsia*;41(11):1456-1462. doi/pdf/10.1111/j.1528-1157.2000.tb00122.x
- Limotai, C., Phayaph, N., Pattanasilp, B., Mokklaew, J., Limotai, N., 2020. Effects of antiepileptic drugs on electroencephalography (EEG): Insights and applicability. *Epilepsy & Behavior*;110:107161. doi: 10.1016/j.yebeh.2020.107161.
- Lumbantobing, S.M., 2007. *Etiologi dan faal sakitan epilepsi*. Buku Ajar Neurologi. Edisi kedua FKUI. Departemen Ilmu Kesehatan Anak FKUI, Jakarta. p.197-203.
- Maclarens, J., Han, Z., Vos, S.B., Fischbein, N., Bammer, R., 2014. Reliability of brain volume measurements: *A test-retest dataset, in Scientific Data*. pp. 131–141. doi:10.1038/sdata.2014.37.
- Manjón, J. V., Coupé, P., 2016. Volbrain: An online MRI brain volumetry system. *Front. Neuroinform*;10: 1–14. doi:10.3389/fninf.2016.00030.
- Monti, J.M., (2013). Excitatory Aminocid Neurotransmission. In: *Psychopharmacology*. The Fourth Generation in Progress. Raven Press, New York: 70-80.
- Muttaqin, Z., 2012. Epilepsy Surgery in Indonesia: Achieving a Better Result with Limited Resources. *Bali Medical Journal*;1(2):57–63. <http://ojs.unud.ac.id/index.php/bmj/article/view/4545>.
- Oyegbile, T. O., Bayless, K., Dabbs, K., Jones, J., Rutecki, P., Pierson, R., et al., 2011. The nature and extent of cerebellar atrophy in chronic temporal lobe epilepsy. *Epilepsia*;52(4):698-706. doi:10.1111/j.1528-1167.2010.02937.x.
- Pardoe, H., Kuzniecky, R., 2014. Advanced imaging techniques in the diagnosis of nonlesional epilepsy: MRI, MRS, PET, and SPECT: Advanced Imaging



Techniques in the Diagnosis of Nonlesional Epilepsy. *Epilepsy Current*;14(3):121–124.

Pitkanen A., Roivainen, R., Lukasiuk, K., 2015. *Development of epilepsy after ischaemic stroke. Review*, Lancet Neurology. [https://dx.doi.org/10.1016/S1474-4422\(15\)00248-3](https://dx.doi.org/10.1016/S1474-4422(15)00248-3).

Ponnatapura, J., 2018. Utility of Magnetic Resonance Imaging Brain Epilepsy Protocol in New-Onset Seizures: How is it Different in Developing Countries. *Journal of Clinical Imaging Science*;8(1):43. doi: 10.4103/kcis.JCIS\_38\_18.

Ponnusamy, S., 2017. *Gambaran Elektroensefalografi Pada Pasien Epilepsi di Rumah Sakit Umum Pusat Haji Adam Malik September 2016-September 2017*. Program Studi Pendidikan Dokter Fakultas Kedokteran Universitas Sumatera Utara, Medan.

Princich, J.P., Donnelly-Kehoe, P.A., Deleglise, A., Vallejo-Azar, M.N., Pascariello, G.O., Seoane, P., et al., 2021. Diagnostic Performance of MRI Volumetry in Epilepsy Patients with Hippocampal Sclerosis Supported Through a Random Forest Automatic Classification Algorithm. *Frontiers in Neurology*;12: 613967. doi: 10.3389/fneur.2021.613967.

Raji, C.A., Ly, M., Benzinger, T.L.S., 2019. Overview of MR Imaging Volumetric Quantification in Neurocognitive Disorders. *Top. Magnetic Resonance Imaging*;28: 311–315. doi:10.1097/RMR.0000000000000224.

Reddy, D., S., 2017. Sex Differences in the Anticonvulsant Activity of Neurosteroids. *Journal of Neuroscience Research*;95:661-670. doi:10.1002/jnr.23853.

Salinsky, M. C., Spencer, D. C., Oken, B. S., Storzbach, D., 2004. Effects of oxcarbazepine and phenytoin on the EEG and cognition in healthy volunteers. *Epilepsy & Behavior*;5(6):894-902. doi: 10.1016/j.yebeh.2004.07.011.

Salmenpera, T.M., Duncan, J.S., 2005. Imaging in Epilepsy. *Journal of Neurology, Neurosurgery, and Psychiatry*;76(3): iii2-iii10. doi:10.1136/jnnp.2005.075135.



- Salmenpera, T.M., Kalviainen, R., Partanen, K., Pitkanen, A., 2001. Hippocampal and amygdaloid damage in partial epilepsy: a cross-sectional MRI study of 241 patients. *Epilepsy Research Journals*; 46:69 –82.
- Sastroasmoro, S., Ismael, 2011. *Dasar-dasar Metodologi Penelitian*, 4th edition. Sagung Seto, Jakarta. 55-57.
- Sayehmiri, K., Tavan, H., Sayehmiri, F., Mohammadi, I., Carson, K. V., Prevalence of Epilepsy in Iran: A Meta-Analysis and Systematic Review. *Iranian Journal of Child Neurology*;8(4):9-17. Retrieved from <https://pubmed.ncbi.nlm.nih.gov/25657765/>
- Scheffer, I.E., Berkovic, S., Capovilla, G., Connolly, M.B., French, J., Guilhoto, L., et al., 2017. ILAE classification of the epilepsies: Position paper of the ILAE Commission for Classification and Terminology. *Epilepsia*;58(4):512-521. doi: 10.1111/epi.13709.
- Seidenberg, M., Kelly, K.G., Parrish, J., Geary, E., Dow, C., Rutecki, P., 2005. Ipsilateral and contralateral MRI volumetric abnormalities in chronic unilateral temporal lobe epilepsy and their clinical correlates. *Epilepsia*;46(3):420–430.
- Shih, T., 2012. Electroencephalography. In: Brust C.M. *Current Diagnosis and Treatment for Neurology*. McGraw Hill Lange, USA: 1-3, 47-64.
- Solomon, N. 2021. *Kenhub*. *Kenhub*. Retrieved from <https://www.kenhub.com/en/library/anatomy/hippocampus-structure-and-functions>.
- Szabo, C.A., Lancaster, J.L., Lee, S., Xiong, J.H., Cook, C., Mayes, B.N., Fox, P.T., 2006. MR Imaging Volumetry of Subcortical Structures and Cerebellar Hemispheres in Temporal Lobe Epilepsy. *American Journal Neuroradiology*;27:2155-2160.
- Tatu, L., Vuillier, F., 2014. Structure and Vascularization of the Human Hippocampus. *Frontiers of Neurology and Neuroscience*;34:18-25. doi :10.1159/000356440.



UNIVERSITAS  
GADJAH MADA

KORELASI NILAI VOLUMETRIK MRI HIPPOCAMPUS DAN CEREBELLUM DENGAN GAMBARAN EEG  
PENDERITA EPILEPSI

PUTRI ATMANI S, Dr. dr. Lina Choridah, Sp. Rad (K) PRP; dr. Sri Retna Dwidianarti, Sp. Rad (K) Onk

Universitas Gadjah Mada, 2022 | Diunduh dari <http://etd.repository.ugm.ac.id/>

- Van Essen, D.C., Donahue, C.J., Glasser, M.F., 2018. Development and Evolution of Cerebral and Cerebellar Cortex. *Brain Behaviour Evolution*;91(3):158-169. doi:10.1159/000489943.
- Wasterlain, C.G., Fujikawa, D.G., Penix, L., Sankar, R., 1993. Pathophysiological Mechanisms of Brain Damage from Status Epilepticus. *Epilepsia*;1: 37-53.
- Watson, C., Jack, C.R., Cendes, F., 1997. Volumetric magnetic resonance imaging: clinical applications and contributions to the understanding of temporal lobe epilepsy. *Arch Neurology*;54(12):1521–1531. doi:10.1001/archneur.1997.00550240071015.
- Witter, L., De Zeeuw, C.I., 2015. Regional functionality of the cerebellum. *Current Opinion in Neurobiology*;33:150-155. doi:10.1016/j.conb.2015.03.017.
- WHO. 2012. *Epilepsy*. Fact sheet 999. Retrieved from <https://www.who.int/news-room/fact-sheets/detail/epilepsy>.