

## DAFTAR PUSTAKA

- Abdissa D, Hamba N, Kene K, Bedane DA, Etana G, Muleta, D, et al. 2020. 'Prevalence and Determinants of Peripheral Neuropathy among Type 2 Adult Diabetes Patients Attending Jimma University Medical Center, Southwest Ethiopia, 2019, an Institutional-Based Cross-Sectional Study', *Journal of Diabetes Research*, vol. 2020, hh. 1-8.
- Abdullah QH, Omer SH, Mohammed MO. 2015. 'Diabetic Polyneuropathy: Role of Oxidative Stress and Inflammation', *World Journal of Pharmacy and Pharmaceutical Sciences*, vol. 4, no. 02, hh. 88-101.
- Akter N, 2019. 'Diabetic Peripheral Neuropathy: Epidemiology, Physiopathology, Diagnosis and Treatment', *Delta Medical College Journal*, vol. 7, no. 1, hh. 35-48.
- Aleidan FAS, Ahmad BA, Alotaibi FA, Aleesa DH, Alhefdhi NA, Badri M, Galil A, et al. 2020. 'Prevalence and Risk Factors for Diabetic Peripheral Neuropathy Among Saudi Hospitalized Diabetic Patients: A Nested Case-Control Study', *International Journal of General Medicine*, vol. 13, hh. 881-889.
- Alkozai EM, Lisman T, Porte RJ dan Nijsten MW. 2014. 'Early elevated serum gamma glutamyl transpeptidase after liver transplantation is associated with better survival', *F1000 Research*, vol. 3, no. 3, hh. 85.
- Almuhannadi H, Ponirakis G, Khan A, Malik RA. 2018. 'Diabetic neuropathy and painful diabetic neuropathy: Cinderella complications in South East Asia', *Journal of Pakistan Medical Association*, vol. 68, no. 1, hh. 85-89.
- Amelia R, Wahyuni AS, Yunanda Y. 2019. 'Diabetic neuropathy among type 2 diabetes mellitus patients at amplas primary health care in Medan city'. *Open Access Macedonian Journal of Medical Science*, vol. 7, no. 20, hh. 3400-3.
- American Diabetes Association. 2019. 'Standards of Medical Care in Diabetes'. *Diabetes Care*, vol. 42, Sppl. 13-14.
- Andersen ST, Witte DR, Dalsgaard EM, Andersen H, Nawroth P, Fleming T, et al. 2018 ' Risk Factors for Incident Diabetic Polyneuropathy in a Cohort With Screen-Detected Type 2 Diabetes Followed for 13 Years: ADDITION-Denmark, *Diabetes Care*, vol. 41, no. 5, hh. 1068-1075.
- Anjos LRB, Rebelo ACS, Pedrino GR, Santos RS, Reis AAS. 2018. 'Impact of Oxidative Changes and Possible Effects of Genetics Polymorphisms of Glutathione S-Transferase in Diabetics Patients with Complications', *Glutathione in Health and Disease*, dilihat 26 Mei 2021, <https://www.intechopen.com/chapters/60640>.
- Boulton AJM, Malik RA, Arezzo JC, Sosenko JM. 2004. 'Diabetic Somatic Neuropathies', *Diabetes Care*, vol. 27, no. 6, hh. 14658-14687.

- Boulton AJM, Vinik AI, Arezzo JC, Bril V, Feldman EL, Freeman R, et al. 2005. 'Diabetic Neuropathies: A statement by the American Diabetes Association', *Diabetes Care*, vol. 28, no. 4, hh. 956-661.
- Brownlee, Michael. 2005. The Pathobiology of Diabetic Complications A Unifying Mechanism, *Diabetes*, vol. 54, no. 6, hh. 1615-1625.
- Callaghan BC, Gallagher G, Fridman V, Feldman EL. 2020. 'Diabetic neuropathy: what does the future hold?', *Diabetologia*, vol. 63, no. 5, hh. 891-897.
- Campagna D, Alamo A, di Pino A, Russo C, Calogero AE, Purrello F, et al. 2019. 'Smoking and diabetes: Dangerous liaisons and confusing associations'. *Diabetology and Metabolic Syndrome*, vol. 11, no.1, hh. 1-12
- Charles M, Soedamah-Muthu, SS, Tesfaye, S, Fuller JH, Arezzo JC, Chaturvedi N. 2010. 'Low Peripheral Nerve Conduction Velocities and Amplitudes are Strongly Related to Diabetic Microvascular Complication in Type 1 Diabetes'. *Diabetes Care*. Vol. 33, hh. 2648-2653.
- Cho HC. 2010. 'The Association between Serum GGT Concentration and Diabetic Peripheral Polyneuropathy in Type 2 Diabetic Patients', *Korean Diabetes Journal*, vol. 34, no. 2, hh. 111-118.
- Decroli E. 2019. 'Diabetes mellitus Tipe 2', Edisi ke-1. Padang: Pusat Penerbitan Bagian Ilmu Penyakit Dalam Fakultas Kedokteran Universitas Andalas, hh. 11-20
- Deli G, Bosnyak E, Pusch G, Komoly S, Feher G. 2013. 'Diabetic Neuropathies: Diagnosis and Management', *Neuroendocrinology*, vol. 98, no. 4, hh.267–280.
- Dinh LT, Phi TNN, Tran TTH, Luong CT, Ho TNL, do Nhu B, et al. 2022. 'Diabetic Peripheral Neuropathy Associated with Cardiovascular Risk Factors and Glucagon-Like Peptide-1 Concentrations Among Newly Diagnosed Patients with Type 2 Diabetes Mellitus. Diabetes, Metabolic Syndrome and Obesity: Targets and Therapy'. vol.15, hh. 35–44.
- Divya R, Ashok V, Abeetha S. 2018. 'Evaluation of serum gamma-glutamyl transferase levels in type 2 diabetic patients with and without neuropathy', *International Journal of Physiology*, vol. 8, no. 2, hh. 25-28.
- Duby JJ, Campbell RK, Setter SM, White JR, Rasmussen KA. 2004. 'Diabetic neuropathy: An intensive review', *American Journal of Health-System Pharmacy*, vol. 61, no. 2, hh. 160-174.
- Dwi IN. 2016. 'Hubungan Kadar Gamma Glutamyl Transferase dan HS C-Reactive Protein dengan Neuropati diabetikum pada Penderita Diabetes mellitus Tipe 2', tesis: Universitas Sebelas Maret, Surakarta.
- Dyck PJ, Albers JW, Andersen H, Arezzo JC, Biessels GJ, Bril V, Feldman EL, et al. 2011. 'Diabetic polyneuropathies: update on research definition, diagnostic criteria and estimation of severity', *Diabetes/Metabolism Research and Reviews*, vol. 27, no.7, hh. 620–628.

- Faiqotunnuriyah, Cahyati WH. 2021. 'Faktor yang Berhubungan Dengan Kejadian Neuropati Diabetik pada Penderita Diabetes Melitus Tipe 2'. *Jurnal Kesmas Indonesia*. vol. 13, no. 1, hh. 64–76.
- Fateh HR, Madani SP, Heshmat R, Larijani B. 2016. 'Correlation of Michigan neuropathy screening instrument, United Kingdom screening test and electrodiagnosis for early detection of diabetic peripheral neuropathy', *Journal of Diabetes & Metabolic Disorders*, vol. 15, no. 8, hh. 1-5
- Feldman EL, Callaghan BC, Pop-Busui R, Zochodne DW, Wright DE, Bennett DL, et al. 2019. 'Diabetic neuropathy', *Disease Primers*, vol. 5, no, 41, hh. 1-18.
- Figuroa-Romero C, Sadidi M, Feldman EL. 2008. Mechanisms of disease: The oxidative stress theory of diabetic neuropathy. *Rev Endocr Metab Disord*, vol 9. hh. 301–314
- Goncalves NP, Vegter CB, Andersen H, Østergaard L, Calcutt NA, Jensen TS. 2017. 'Schwann cell interactions with axons and microvessels in diabetic neuropathy', *Nature Review Neurology*, vol. 13, no. 3, hh. 135-147.
- [Gorson](#) KC, Herrmann DN, Thiagarajan R, Brannagan TH, Chin RL, Kinsella LJ, et al. 2008. 'Non-length dependent small fibre neuropathy/ganglionopathy', *Journal of Neurology, Neurosurgery, and Psychiatry*, vol. 79, no. 2, hh. 163-9.
- Hansen JM, Harris C. 2014. Glutathione during embryonic development, *Biochimica et Biophysica Acta*, vol. 1850, no. 8, hh. 1527-42.
- Hicks CW, Selvin E. 2019. 'Epidemiology of Peripheral Neuropathy and Lower Extremity Disease in Diabetes', *Current Diabetes Reports*, vol. 19, no. 86, hh. 1-8.
- Huang L, Shen X, Huang L, Yan S, Wu P. 2021. 'Identification of independent risk factors for diabetic neuropathy progression in patients with type 2 diabetes mellitus'. *Journal of International Medical Research*. vol. 49, no. 9, hh: 1-5
- Huber PC, Almeida WP. 2008. Glutathione and related enzymes: Biological role and importance in processes pathological. *Quimica Nova*, vol, 31, no 5. hh.1170-1179
- International Diabetes Federation Atlas. 2014. 'Diabetes Research and Clinical Practice', vol. 103, hh. 137-149
- Januar dan Basuki, Mudjiani. 2021. 'Association of Gamma-GT Serum and Nerve Conduction Velocity of Nervus Peroneus Motor Vehicles on Diabetic Polyneuropathy Patients', *Indian Journal of Forensic Medicine & Toxicology*, vol. 15, no. 1, hh. 1859-1864.
- Jember G, Melsew YA, Fisseha B, Sany K, Gelaw AY, Janakiraman B. 2017. 'Peripheral Sensory Neuropathy and associated factors among adult diabetes mellitus patients in Bahr Dar, Ethiopia', *Journal of Diabetes & Metabolic Disorders*, vol. 16, no. 16, hh. 1-8.
- Jyothirmayi B, Sanjayseth, Kaviarasi S, William E. 2012. 'Study Of Serum Ggt Levels and Lipid Profile in Diabetic Peripheral Neuropathy', *International Journal of Pharma and Bio Sciences*, vol. 3, no. 4, hh. 995-1000.

- Khan N dan Smith MT. 2015. 'Neurotrophins and Neuropathic Pain: Role in Pathobiology', *Molecules*, vol. 2015, no. 20, hh. 10657-10688.
- Li Z, Lei X, Xu B, Wang S, Gao T, Lu H. 2020. 'Analysis of risk factors of diabetes peripheral neuropathy in type 2 diabetes mellitus and nursing intervention'. *Experimental and Therapeutic Medicine*. vol. 20, no. 6, hh. 1-10.
- Liu X, Xu Y, An M, Zeng Q. 2019. 'The risk factors for diabetic peripheral neuropathy: A meta-analysis. *PLoS ONE*. vol. 14, no. 2, hh. 1-16
- Madanchi N, Tabatabaei-Malazy O, Pajouhi M, Heshmat R, Larijani B, Mohajeri-Tehrani MR. 2013. 'Who are diabetic foot patients? A descriptive study on 873 patients', *Journal of Diabetes & Metabolic Disorders* , vol. 12, no. 36, hh. 1-6.
- Mao F, Zhu X, Liu S, Qiao X, Zheng H, Lu B, et al. 2019. 'Age as an independent risk factor for diabetic peripheral neuropathy in chinese patients with Type 2 diabetes'. *Aging and Disease*. vol. 10, no. 3, hh. 592-600.
- Mason JE, Starke RD, Van Kirk JE. 2010, 'Gamma-glutamyl transferase: a novel cardiovascular risk biomarker', *Preventive Cardiology*, vol. 13, no. 1, hh. 36-41.
- Mete T, Aydin Y, Saka M, Yavuz HC, Bilen S, Yalcin Y, et al. 2013. 'Comparison of Efficiencies of Michigan Neuropathy Screening Instrument, Neurothesiometer, and Electromyography for Diagnosis of Diabetic Neuropathy', *International Journal of Endocrinology*, vol. 2013, hh. 1-8
- Middleberg RP, Benjamin B. 2012. Loci affecting gamma-glutamyl transferase in adult and adolescent show age interaction and cardio metabolic associations, *Human Molecular Genetics*, vol. 21, no 2m hh. 446-455.
- Mizisin AP, Vu Y, Shuff M, Calcutt NA. 2004. 'Ciliary Neurotrophic Factor Improves Nerve Conduction and Ameliorates Regeneration Deficits in Diabetic Rats', *Diabetes*, vol. 53, no. 7, hh. 1807-12.
- Murray RK. 2009. 'Sel Darah Merah dan Putih'. Dalam (Murray, RK, Granner, DK, dan Rodwell, VW) *Biokimia Harper (Harper's Illustrated Biochemistry)*. Edisi ke-1, Jakarta: Penerbit Buku Kedokteran EGC, hh. 639-640
- Mushari M. 2011. 'Hubungan Kadar Gamma Glutamyltransferase dan Kecepatan Hantaran Saraf pada Penderita Neuropati diabetik', tesis: Fakultas Kedokteran Universitas Sumatera Utara, Medan.
- Nakagawa H, Isogawa A, Tateishi R, Tani M, Yoshida H, Yamakado M, et al 2012. 'Serum gamma-glutamyltransferase level is associated with serum superoxide dismutase activity and metabolic syndrome in a Japanese population', *Journal of gastroenterology*, vol. 47, no. 2, hh. 187-94.
- National Institute of Diabetes and Digestive and Kidney Disease 2009, *Diabetes Review*, dilihat 26 Mei 2021, <https://www.niddk.nih.gov/health-information/diabetes>.

- Ndrepepa G, Kastrat A. 2016. Gamma-glutamyl transferase and cardiovascular disease, *Annal of Translational Medicine*, vol. 4, no. 24, hh. 481.
- Nwando OC. 2014. Serum Gamma-Glutamyl Transferase, 'Total Antioxidant Concentration and Histological Changes in Liver, Kidney and Heart of Alloxan-Induced Diabetic Rats', Faculty of Health Science and Technology College of Medicine University of Nigeria, Enugu Campus, Nigeria.
- Oemiyati S, Samsudin, Asasin MS, Tamaela LA, Nasar SS. 2011. 'Penerapan Etika Penelitian kedokteran'. Dalam ( Sastroasmoro S, Ismael S ed). *Dasar-dasar Metodologi Penelitian Klinis*, Jakarta: Sagung Seto, hh 383-390.
- Park JH, Park JH, Won JC. 2019. 'Associations of nerve conduction study variables with clinical symptom scores in patients with type 2 diabetes', *Annals of Clinical Neurophysiology*, vol. 21, no. 1, hh. 36-43.
- Pfannkuche A, Alhajjar A, Ming A, Walter I, Piehler C, Mertens PR. 2020. 'Prevalence and risk factors of diabetic peripheral neuropathy in a diabetics cohort: Register initiative "diabetes and nerves"', *Endocrine and Metabolic Science*, vol. 2020, hh. 1-9.
- Piao Y, Liang X. 2012. 'Chinese Medicine in Diabetic Peripheral Neuropathy: Experimental Research on Nerve Repair and Regeneration', *Evidence-Based Complementary and Alternative Medicine*, vol. 2012, no. 191632, hh. 1-13.
- Pisoschi AM, Pop A. 2015. 'The role of antioxidants in the chemistry of oxidative stress: A review', *European Journal of Medicinal Chemistry*, vol. 5, no. 97, hh. 55-74.
- Pittenger G, Vinik A. 2003. 'Nerve Growth Factor and Diabetic Neuropathy', *Experimental Diabetisity Research*, vol. 4, no. 4 hh. 271-285.
- Poernomo H. 2003. 'Dasar-dasar Pemeriksaan Konduksi Saraf'. Dalam (Poernomo H, Basuki M, Widjaja D ed) *Petunjuk Praktis Elektrodiagnostik*, Surabaya: Airlangga University Press, hh. 19-34.
- Pop-Busui R, Boulton AJM, Feldman EL, Bril V, Freeman Malik RA, et al. 2016. Diabetic Neuropathy: A Position Statement by the American Diabetes Association, *Diabetes Care*, vol. 40, hh. 136-154.
- Rina HS, Nugroho H, Hadisaputro S, Pemayun TGD. 2016. 'Faktor-Faktor Risiko Kejadian Kaki Diabetik pada Penderita Diabetes mellitus Tipe 2 (Studi Kasus Kontrol di RSUP dr. M. Djamil Padang)', *Jurnal Epidemiologi Kesehatan Komunitas*, vol. 1, no. 2, hh. 48-60.
- Riset Kesehatan Dasar. 2018. Laporan nasional 2018. Jakarta
- Ropper AH, Samuels MA, Klein JP. 2014, *Adam and Victor's Principles of Neurology*, 10<sup>th</sup> edition, United States: McGraw-Hill Education, hh. 1295-1299.
- Sandireddy R, Yerra VG, Areti A, Komirishetty P, Kumar A. 2014. 'Neuroinflammation and Oxidative Stress in Diabetic Neuropathy: Futuristic Strategies Based on These Targets', *International Journal of Endocrinology*, vol. 2014, hh. 1-10.

- Schreiber AK, Nones CFM, Reis RC, Chichorro JG, Cunha JM. 2015. 'Diabetic neuropathic pain: Physiopathology and treatment', *World Journal Diabetes*, vol. 6, no. 3, hh. 432-444.
- Selvarajah D, Kar D, Khunt K, Davies MJ, Scott AR, Walker J, Tesfaye S. 2019. 'Diabetic peripheral neuropathy: advances in diagnosis and strategies for screening and early intervention', *Lancet Diabetes Endocrinology*, vol. 7, no. 12, hh. 938-948.
- Shakher J, Stevens MJ. 2011. 'Update on the management of diabetic Polyneuropathies', *Diabetes, Metabolic Syndrome and Obesity: Targets and Therapy*, vol. 2011, no. 4, hh. 289-305.
- Sheikh M, Tajdini M, Shafiee A, Sotoudeh AAM, Jalali A, Poorhosseini H, Amirzadegan A. 2017. 'Association of serum gamma-glutamyltransferase and premature coronary artery disease', *Netherlands Heart Journal*, vol. 25, no. 7-8, hh. 439-445.
- Sjahrir H 2006, *Diabetic Neuropathy: The Pathoneurobiology and Treatment Update*. Medan: USU Press.
- Subekti I. 2010. 'Neuropati perifer', Dalam (Sudoyo AW, Setiyohadi B, Alwi I, Simadibrata M, Setiati S, editors) *Buku Ajar Ilmu Penyakit Dalam*. Edisi ke-5. Jakarta: Pusat Penelitian Ilmu Penyakit Dalam FKUI, hh. 1947-51.
- Tesfaye S, Boulton AJM, Dyck PJ, Freeman R, Horowitz M, Kempner P, et al. 2010. 'Diabetic Neuropathies: Update on Definitions, Diagnostic Criteria, Estimation of Severity, and Treatments', *Diabetes Care*, vol 33, no. 10, hh. 2285-2293.
- Tracy JA, Dyck PJ. 2012. 'Diabetic Neuropathy'. Dalam (Donofrio PD ed) *Peripheral Neuropathy*, 1<sup>st</sup> edition. New York : Demos Medical, hh, 57-64.
- Vincent AM, Russell JW, Low P, Feldman EL. 2004. 'Oxidative Stress in the Pathogenesis of Diabetic Neuropathy', *Endocrine Reviews*, vol. 25, no. 4, hh. 612-628.
- Vinik AI, Bril V, Litchy WJ, Price KL, Bastyr EJ. 2005. Sural Sensory Action Potential Identifies Diabetic Peripheral Neuropathy Responders To Therapy, *Muscle Nerve*, vol. 32, no. 5, hh. 619-625.
- Wiratman W, Safri AY, Indrawati LA, Octaviana F, Hkim M. 2017. 'Neuropati'. Dalam (Aninditha T, Wiratman W ed) *Buku Ajar Neurologi Jilid II*. Edisi ke-1, Jakarta: Badan Penerbit FKUI, hh. 663-671.
- WHO. 2016. Global Reports on Diabetes.
- Yagihashi S, Mizukami H, Sugimoto K. 2010. 'Mechanism of diabetic neuropathy: Where are we now and where to go?', *Journal of Diabetes Investigation*, vol. 2, no. 1, hh. 18-32.
- Yang H, Sloan G, Ye Y, Wang S, Duan B, Tesfaye S, Gao L. 2020. 'New Perspective in Diabetic Neuropathy: From the Periphery to the Brain, a Call for Early Detection, and Precision Medicine', *Endocrinology*, vol. 10, no. 929, hh. 1-13.