

DAFTAR PUSTAKA

1. Sert ZS. The role of serum netrin-1 level in the detection of early-onset preeclampsia. *Eur J Obstet Gynecol Reprod Biol.* 2022 Mar;270:164–8.
2. Yuksel S, Ozyurek SE, Acar DK, Ozdemir C, Guler S, Kiyak H, et al. Urinary neutrophil gelatinase-associated lipocalin is associated with preeclampsia in a cohort of Turkish women. *Hypertens Pregnancy.* 2019 Jul 3;38:157–62.
3. Kementerian Kesehatan RI. Profil Kesehatan Indonesia Tahun 2019. Jakarta; 2020.
4. Dinas Kesehatan Kota Padang. Profil Kesehatan Kota Padang Tahun 2019. Padang; 2020 Dinas Kesehatan Kota Padang. Profil Kesehatan Kota Padang Tahun 2019. Padang; 2020.
5. Tsurayya, Pertiwi Femilia. Karakteristik dan Outcome Pasien Preeklampsia Berat di RSUP Dr. M. Djamil Padang Tahun 2020. Universitas Andalas. 2022.
6. Bygbjerg IC. Double Burden of Noncommunicable and Infectious Diseases in Developing Countries. *Science (80-).* 2012 Sep 21;337:1499–501.
7. Bilano VL, Ota E, Ganchimeg T, Mori R, Souza JP. Risk Factors of Pre-Eclampsia/Eclampsia and Its Adverse Outcomes in Low- and Middle-Income Countries: A WHO Secondary Analysis. Young RC, editor. *PLoS One.* 2014 Mar 21;9:e91198.
8. Owaraganise A, Migisha R, Ssalongo WGM, Tibaijuka L, Kayondo M, Twesigomwe G, et al. Nonproteinuric Preeclampsia among Women with Hypertensive Disorders of Pregnancy at a Referral Hospital in Southwestern Uganda. Chigusa Y, editor. *Obstet Gynecol Int.* 2021 Aug 30;2021:1–6.
9. Sisti G, Rubin G, Zhou C, Orth T, Schiattarella A. Neutrophil gelatinase-associated lipocalin as a predictor of pre-eclampsia: A systematic review and meta-analysis. *Int J Gynaecol Obstet.* 2023;163(1):63-74.

doi:10.1002/ijgo.14777

10. Gupta S, Tomar DS. NGAL for Preeclampsia: How Sure are We? *Indian J Crit Care Med.* 2021 Sep 8;25:972–3.
11. Yalman MV, Madendag Y, Sahin E, et al. Effect of preeclampsia and its severity on maternal serum NGAL and KIM-1 levels during pregnancy and the post-pregnancy period. *Eur J Obstet Gynecol Reprod Biol.* 2021;256:246-251. doi:10.1016/j.ejogrb.2020.11.040
12. Wang Y, Gu Y, Gu X, Cooper DB, Lewis DF. Evidence of kidney injury in preeclampsia: Increased maternal and urinary levels of NGAL and KIM-1 and their enhanced expression in proximal tubule epithelial cells. *Front Med.* 2023;10:1130112.
13. Simonazzi G, Capelli I, Curti A, Comai G, Rizzo N, La Manna G. Serum and Urinary Neutrophil Gelatinase-associated Lipocalin Monitoring in Normal Pregnancy Versus Pregnancies Complicated by Pre-eclampsia. *In Vivo.* 2015;29(1):117-121.
14. Dogan N, Yildirmaki S, Mihmanli V, et al. Serum neutrophil gelatinase associated lipocalin and plasma nitric oxide levels in healthy and preeclamptic pregnant. *Clin Exp Obstet Gynecol.* 2014;41(6):700-703.
15. The American College of Obstetricians and Gynecologists. ACOG Practice bulletin: Clinical management guidelines for obstetrician-gynecologist. *Obstetrics & Gynecology.* 2020; 135(6): e237-60.
16. Karrar SA, Hong PL. Preeclampsia [Internet]. *StatPearls.* 2023.
17. Cunningham, Leveno, Dashe, Hoffman, Spong, Casey. *Williams Obstetrics* 26th edition. McGraw Hill. 2022
18. Kornacki J, Olejniczak O, Sibiak R, Gutaj P, Wender-Ozegowska E. Pathophysiology of pre-eclampsia - two theories of the development of the disease. *Int J Mol Sci.* 2024; 25(307):1-18.
19. Burton GJ, Redman CW, Roberts JM, Moffett A. Pre-eclampsia: pathophysiology and clinical implications. *BMJ.* 2019;366:l2381.
20. Roberts JM, Rich-Edwards JW, McElrath TF, Garmire L, Myatt L; Global Pregnancy Collaboration. Subtypes of Preeclampsia: Recognition and Determining Clinical Usefulness. *Hypertension.* 2021;77(5):1430-1441.

doi:10.1161/HYPERTENSIONAHA.120.14781

21. Dimitriadis E, Rolnik DL, Zhou W, et al. Pre-eclampsia. *Nat Rev Dis Primers*. 2023;9(1):8.
22. Redman CW. Early and late onset preeclampsia: Two sides of the same coin. *Pregnancy Hypertension: An International Journal of Women's Cardiovascular Health*. 2017; 7:58,
23. Liu N, Guo Y-N, Gong L-K, Wang B-S. Advances in biomarker development and potential application for preeclampsia based on pathogenesis. *Eur J Obstet Gynecol Reprod Biol X*. 2021 Jan;9:100119.
24. Guralp S, Tuten N, Oncul M, Acikgoz S, Ekmekci H, Tuten A. Neutrophil Gelatinase-Associated Lipocalin Levels in Early and Late Onset Preeclampsia. *Gynecology Obstetrics & Reproductive Medicine*. 2019;26(1). 10.21613/GORM.2018.918.,
25. Chaiworapongsa T, Korzeniowski S, Schwartz A, Chaemsathong P, Dong Z, Yeo L, et al. Third trimester neutrophil gelatinase-associated lipocalin and angiogenic/anti-angiogenic factors for the identification of late preeclampsia. *AJOG*. 2013: S277.
26. Pihl K, Sørensen S, Stener Jørgensen F. Prediction of Preeclampsia in Nulliparous Women according to First Trimester Maternal Factors and Serum Markers. *Fetal Diagn Ther*. 2020;47:277–83
27. Romejko K, Markowska M, Niemczyk S. The Review of Current Knowledge on Neutrophil Gelatinase-Associated Lipocalin (NGAL). *Int J Mol Sci*. 2023 Jun 21;24:10470.
28. Wei Y, Li L, Wang F, Fu L, Li Z, Hu Y. Circulating neutrophil gelatinase-associated lipocalin and preeclampsia: a meta-analysis. *J Matern Neonatal Med*. 2023 Dec 31;36.
29. Schmitz EM, Langelan ML, de Groot MJ, Ermens TA, Joosen AM. Trimester-specific reference intervals for cystatin C and neutrophil gelatinase-associated lipocalin during pregnancy. *Annals of Clinical Biochemistry*. 2022;59(3):199-204. doi:10.1177/00045632221076354
30. Kadas S, Okon K, Chama C, et al. Haematological Profile of Pregnant Women Attending Antenatal Clinic in Bauchi, Nigeria. *Open Journal of*

- Obstetrics and Gynecology. 2020; 10: 1776-1787.
10.4236/ojog.2020.10120160
31. Han VX, Patel S, Jones HF, Nielsen TC, Mohammad SS, Hofer MJ, et al. Maternal acute and chronic inflammation in pregnancy is associated with common neurodevelopmental disorders: a systematic review. *Transl Psychiatry*. 2021 Jan 21;11:71.
32. Parrettini S, Caroli A, Torlone E. Nutrition and Metabolic Adaptations in Physiological and Complicated Pregnancy: Focus on Obesity and Gestational Diabetes. *Front Endocrinol (Lausanne)*. 2020 Nov 30;11.
33. D'anna R, Baviera G, Giordano D, Todarello G, Russo S, Recupero S, et al. Neutrophil gelatinase-associated lipocalin serum evaluation through normal pregnancy and in pregnancies complicated by preeclampsia. *Acta Obstet Gynecol Scand*. 2010 Feb;89:275–8.
34. Ali EA, Hameed BH, Salman AF. The value of Neutrophil gelatinase-associated lipocalin and Neutrophil / Lymphocyte Ratio in the diagnosis of preeclampsia and its severity. *J Med Invest*. 2021;68(3.4):321-325. doi:10.2152/jmi.68.321
35. Szczepanski J, Griffin A, Novotny S, Wallace K. Acute Kidney Injury in Pregnancies Complicated With Preeclampsia or HELLP Syndrome. *Front Med*. 2020 Feb 7;7
36. Zarad A, Shaarawy S, Anwer HF, Elwafa RA, El-Medany S. Renal resistance indices and neutrophil gelatinase-associated lipocalin for early prediction of acute kidney injury in patients with severe preeclampsia. *Egypt J Anaesth*. 2020 Jan 1;36:256–63.
37. Conti-Ramsden FI, Nathan HL, De greeff A, Hall DR, Seed PT, Chappell LC, et al. Pregnancy-Related Acute Kidney Injury in Preeclampsia. Hypertension. 2019 Nov;74:1144–51
38. Scazzochio E, Munmany M, Garcia L, et al. Prognostic role of maternal neutrophil gelatinase-associated lipocalin in women with severe early-onset preeclampsia [published correction appears in *Fetal Diagn Ther*. 2022;49(1-2):66.
39. Ødum L, Andersen A, Hviid T. Urinary neutrophil gelatinase-associated

- lipocalin (NGAL) excretion increases in normal pregnancy but not in preeclampsia. *Clinical Chemistry and Laboratory Medicine (CCLM)*. 2014;52(2): 221-225. <https://doi.org/10.1515/cclm-2013-0547>
40. Ikram Ullah M. Comparison of serum neutrophil gelatinase-associated lipocalin (NGAL) levels in pre-eclamptic and normotensive pregnant women. *Rawal Med J*. 2020 Feb 20;45:154–7.
41. Salhotra R, Tyagi A, Das S, Garg D, Yadav P, Singh PK. Acute Kidney Injury in Severe Preeclamptic Patients Admitted to Intensive Care Unit: Epidemiology and Role of Serum Neutrophil Gelatinase-associated Lipocalin. *Indian J Crit Care Med*. 2021 Sep 8;25:1013–9.
42. Zhang, H. B., Fan, J. M., Zhu, L. L., Yuan, X. H., & Shen, X. W. (2019). Combination of NGAL and Cystatin C for Prediction of Preeclampsia at 10-14 Weeks of Gestation. *Clinical laboratory*, 65(5), 10.7754/Clin.Lab.2018.180831. <https://doi.org/10.7754/Clin.Lab.2018.180831>
43. Aziz MA, Wibowo A, Almira NL, Sutjighassani T. Relationship of Age, Body Mass Index, Gravida, and Parity in Pregnant Women with the Incidence Preeclampsia. *Obgynia*. 2022; 5.
44. Tiwari S, Khandpur S, Bhardwaj M, Asif S. Gender Type and Age Are Associated With Urinary Neutrophil Gelatinase-Associated Lipocalin (NGAL) in CKD Naïve Individuals. *J Am Soc Nephro*. 2022; 33.
45. Arwan B, Sriyanti R. Relationship between Gravida Status, Age, BMI (Body Mass Index) and Preeclampsia. *Andalas Obstetrics and Gynecology Journal*. 2020; 4(1): 13-22.
46. Galuh, Sri Inti, Masadi, Hindun Mardiana, Driana Permata. The Relationship between Obesity and the Incidence of Pre-Eclampsia. *jqph* [Internet]. 2022 Nov. 17 [cited 2025 Jun. 23];6(1):296-8. Available from: <https://jqph.org/index.php/JQPH/article/view/434>
47. Susanti E, Ruspita M, Isharyanti S. Parity And Body Mass Index As Factors In Preeclampsia Incidence. 2024; 13(2): 145-52.
48. Lopez-Jaramillo P, Barajas J, Rueda-Quijano SM, Lopez-Lopez C, Felix C. Obesity and Preeclampsia: Common Pathophysiological Mechanisms.

Front Physiol. 2018 Dec 19;9:1838. doi: 10.3389/fphys.2018.01838. PMID: 30618843; PMCID: PMC6305943.

49. Irhamna R, Pramesthi XA, Nasrullah YA, Wartiningsih M. Prevent mortality rates of pregnant women in preeclampsia condition based on characteristics analysis (case study in RSUD Dr. Mohammad Soewandhie Surabaya 2017). *Rev Prim Care Prac and Educ*. 2019; 2(3): 95-98.
50. Kassa BG, Asnkew S, Ayele AD, Nigussie AA, Demilew BC, Mihirete GN (2023) Preeclampsia and its determinants in Ethiopia: A systematic review and meta-analysis. *PLoS ONE* 18(11): e0287038. <https://doi.org/10.1371/journal.pone.0287038>
51. Springer S, Franz M, Worda K, Gorczyca ME, Haslinger P, Worda C. Neutrophil Gelatinase-Associated Lipocalin and Hypertensive Disorders of Pregnancy: A Cohort Study in Twin Pregnancies. *J Clin Med*. 2022 Jul 18;11(14):4163. doi: 10.3390/jcm11144163. PMID: 35887927; PMCID: PMC9318711.
52. Itenov TS, Bangert K, Christensen PH, Jensen JU, Bestle MH; Procalcitonin and Survival Study (PASS)-study group. Serum and plasma neutrophil gelatinase associated lipocalin (NGAL) levels are not equivalent in patients admitted to intensive care. *J Clin Lab Anal*. 2014 Mar;28(2):163-7. doi: 10.1002/jcla.21662. Epub 2014 Jan 6. PMID: 24395189; PMCID: PMC6807606.