

DAFTAR PUSTAKA

- Ali, A., Bhan, C., Malik, M.B., Ahmad, M.Q. & Sami, S.A. 2018. The Prevention and Management of Contrast-induced Acute Kidney Injury: A Mini-review of the Literature. *Cureus*, 10(9): 1–6.
- Andreucci, M. & Faga, T. 2014. Prevention of contrast-induced nephropathy through a knowledge of its pathogenesis and risk factors. *Sci. World J.*, 2014: 16.
- Andreucci, M., Faga, T., Pisani, A., Sabbatini, M. & Michael, A. 2014a. Acute Kidney Injury by Radiographic Contrast Media: Pathogenesis and Prevention. *Biomed Res. Int.*, 2014: 21.
- Andreucci, M., Faga, T., Pisani, A., Sabbatini, M. & Michael, A. 2014b. Pathogenesis of Acute Renal Failure Induced by Iodinated Radiographic Contrast Media. *J Nephrol Hypertens*, 1(1): 1–7.
- Asklany, H.T., Taha, N.M., Hamdy, A. & Magdy, S. 2018. Neutrophil Gelatinase-Associated Lipocalin (NGAL) as a Predictive Biomarker for Contrast Induced Nephropathy, in Moderate Risk Patients after Cardiac Catheterization. *JCERC*, 09(07): 1–5.
- Bagshaw, S.M. & Bellomo, R. 2007. Early diagnosis of acute kidney injury. *Curr Opin Crit Care*, 13: 638–644. <https://journals.lww.com/md-journal/00075198-200712000-00003.fulltext> 8 February 2020.
- BioLegend, I. 2020. ELISA Kit with Pre-coated Plates LEGEND MAX™ Mouse IL-6.
- Bolignano, D., Coppolino, G., Donato, V., Lacquaniti, A., Bono, C. & Buemi, M. 2010. Neutrophil gelatinase-associated lipocalin (NGAL): A new piece of the anemia puzzle? *Med Sci Moni*, 16(6): 131–135.
- Cai, L., Rubin, J., Han, W., Venge, P. & Xu, S. 2010. The origin of multiple molecular forms in urine of HNL/NGAL. *CJASN*, 5(12): 2229–2235.
- Calvin, A., Misra, S. & Pflueger, A. 2017. Contrast-induced acute kidney injury and diabetic nephropathy. *Nat Rev Nephrol*, 17(3): 139–148.
- Candido, S., Maestro, R., Polesel, J., Catania, A., Signorelli, S.S., Mccubrey, J.A. & Libra, M. 2013. Roles of neutrophil gelatinase-associated lipocalin (NGAL) in human cancer ABSTRACT : *impact*, 5(6).
- Chakraborty, S., Kaur, S., Tong, Z., K., S. & Guh, S. 2011. *Neutrophil Gelatinase Associated Lipocalin: Structure, Function and Role in Human Pathogenesis*.
- Chalikias, G., Drosos, I. & Tziakas, D.N. 2016. Contrast-Induced Acute Kidney Injury: An Update. *Cardiovasc Drugs Ther*, 30(2): 215–228.
- Chorin, E., Ben-Assa, E., Konigstein, M., Rofe, M.T., Hochstadt, A., Galli, N., Schnapper, M., Arbel, Y., Rabey, I., Shoshan, J. Ben, Halkin, A., Herz, I., Finkelstein, A., Bazan, S., Keren, G. & Banai, S. 2016. Prevention of post procedural acute kidney injury in the catheterization laboratory in a real-world population. *IJCA*, 226: 1–30. <http://dx.doi.org/10.1016/j.ijcard.2016.10.028>.
- Clerico, A., Galli, C., Fortunato, A. & Ronco, C. 2012. Neutrophil gelatinase-associated lipocalin (NGAL) as biomarker of acute kidney injury: A review

- of the laboratory characteristics and clinical evidences. *Clin Chem Lab Med*, 50(9): 1505–1517.
- Cobas, R.D. 2010. Creatinine Jaffé Gen.2. : 1–5. <http://repository.sustech.edu/bitstream/handle/123456789/12435/Crea.pdf?sequence=3&isAllowed=y>.
- Cruz, D.N., Gaiao, S., Maisel, A., Ronco, C. & Devarajan, P. 2012. Neutrophil gelatinase-associated lipocalin as a biomarker of cardiovascular disease: A systematic review. *Clinical Chemistry and Laboratory Medicine*, 50(9): 1533–1545.
- Decavele, A.S.C., Dhondt, L., De Buyzere, M.L. & Delanghe, J.R. 2011. Increased urinary neutrophil gelatinase associated lipocalin in urinary tract infections and leukocyturia. *Clin Chem Lab Med*, 49(6): 999–1003.
- Delanaye, P., Rozet, E., Krzesinski, J.M. & Cavalier, E. 2011. Urinary NGAL measurement: Biological variation and ratio to creatinine. *Clin Chim Acta*, 412(3–4): 390. <http://dx.doi.org/10.1016/j.cca.2010.10.011>.
- Devarajan. 2014. NGAL for the detection of acute kidney injury in the emergency room. *Biomark Med*, 8(2): 217–219. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3624763/pdf/nihms412728.pdf>.
- Faucon, A.L., Bobrie, G. & Clément, O. 2019. Nephrotoxicity of iodinated contrast media: From pathophysiology to prevention strategies. *Eur. J. Radiol*, 116: 231–241. <https://doi.org/10.1016/j.ejrad.2019.03.008>.
- Filiopoulos, V., Biblaki, D. & Vlassopoulos, D. 2014. Neutrophil gelatinase-associated lipocalin (NGAL): A promising biomarker of contrast-induced nephropathy after computed tomography. *Ren Fail*, 36(6): 979–986.
- Gami, A.S. & Garovic, V.D. 2004. Contrast Nephropathy after Coronary Angiography. *Mayo Clin Proc*, 79(2): 211–219.
- Haase, M., Devarajan, P., Haase-Fielitz, A., Bellomo, R., Cruz, D.N., Wagener, G., Krawczeski, C.D., Koyner, J.L., Murray, P., Zappitelli, M., Goldstein, S.L., Makris, K., Ronco, C., Martensson, J., Martling, C.R., Venge, P., Siew, E., Ware, L.B., Ikizler, T.A. & Mertens, P.R. 2011. The outcome of neutrophil gelatinase-associated lipocalin-positive subclinical acute kidney injury: A multicenter pooled analysis of prospective studies. *JACC*, 57(17): 1752–1761.
- Halliwell, B. 1988. Albumin-An important extracellular antioxidant? *Biochemical Pharmacology*, 37(4): 569–571.
- Han, X. fang, Zhang, X. xiu, Liu, K.M., Tan, H. & Zhang, Q. 2018. Contrast-induced nephropathy in patients with diabetes mellitus between iso- and low-osmolar contrast media: A meta-analysis of full-text prospective, randomized controlled trials. *PLoS ONE*, 13(3).
- He, Y., Deng, Y., Zhuang, K., Li, S., Xi, J. & Id, J.C. 2020. Predictive value of cystatin C and neutrophil gelatinase-associated lipocalin in contrast- induced nephropathy : A meta-analysis. *PLOS ONE*, 15(4): 1–21. <http://dx.doi.org/10.1371/journal.pone.0230934>.
- Heil, W. & Ehrhardt, V. 2008. *Reference Range for Adult and Children*. 9th ed. Germany: Roche Diagnostics GmbH.

- Heyman, S.N., Rosenberger, C., Rosen, S. & Khamaisi, M. 2013. Why Is Diabetes Mellitus a Risk Factor for Contrast-Induced Nephropathy ? , 2013.
- Hossain, M.A., Costanzo, E., Cosentino, J., Patell, C., Qaisar, H., Singh, V., Khan, T., Cheng, J.S., Asif, A. & Vachharajani, T.J. 2018. of Kidney Diseases and Transplantation Review Article Contrast-Induced Nephropathy : Pathophysiology , Risk Factors , and. *Saudi J Kidney Dis Transpl*, 29(1): 1–9.
- Islam, M. & Mamun, A. 2017. Diabetic patients are more prone to develop Contrast- Induced Nephropathy (CIN) after Coronary Angiogram. *JNHFB*, 6: 44–48.
- Kashani, K., Cheungpasitporn, W. & Ronco, C. 2017. Biomarkers of acute kidney injury: The pathway from discovery to clinical adoption. *Clin Chem Lab Med*, 55(8): 1074–1089.
- Kashani, K., Rosner, M.H. & Ostermann, M. 2020. Creatinine: From physiology to clinical application. *Eur. J. Intern. Med.*, 72(October): 9–14.
- Katsiki, N., Fonseca, V. & Mikhailidis, D.P. 2018. Contrast-induced acute kidney injury in diabetes mellitus: Clinical relevance and predisposing factors. Could statins be of benefit? *Journal of Diabetes and its Complications*, 32(11): 982–984. <https://doi.org/10.1016/j.jdiacomp.2018.08.008>.
- Kellum, J.A., Lameire, N., Aspelin, P., Barsoum, R.S., Burdmann, E.A., Goldstein, S.L., Herzog, C.A., Joannidis, M., Kribben, A., Levey, A.S., MacLeod, A.M., Mehta, R.L., Murray, P.T., Naicker, S., Opal, S.M., Schaefer, F., Schetz, M. & Uchino, S. 2012. Kidney disease: Improving global outcomes (KDIGO) acute kidney injury work group. KDIGO clinical practice guideline for acute kidney injury. *ISN*, 2(1): 1–138.
- Krzeminska, E., Wyczalkowska-Tomasik, A., Korytowska, N. & Paczek, L. 2016. Comparison of Two Methods for Determination of NGAL Levels in Urine: ELISA and CMIA. *J. Clin. Lab. Anal.*, 30(6): 956–960.
- Kusirisin, P., Chattipakorn, S.C. & Chattipakorn, N. 2020. Contrast-induced nephropathy and oxidative stress: mechanistic insights for better interventional approaches. *J Transl Med*, 18(1): 1–35. <https://doi.org/10.1186/s12967-020-02574-8>.
- Lerman-Garber, I., Calva-Mercado, J.J., Martínez-Sibaja, C., Del Castillo, C.F., Sánchez-Javier, R.M., Lara, E., Villalobos, I. & Gómez-Pérez, F.J. 2000. Leukocyturia in women with diabetes and its clinical implications. *Archives of Medical Research*, 31(2): 210–215.
- Li, Y. & Ren, K. 2020. The Mechanism of Contrast-Induced Acute Kidney Injury and Its Association with Diabetes Mellitus. *Contrast Media Mol Imaging*: 4–6.
- Ling, W., Zhaohui, N., Ben, H., Leyi, G., Jianping, L., Huili, D. & Jiaqi, Q. 2008. Urinary IL-18 and NGAL as early predictive biomarkers in contrast-induced nephropathy after coronary angiography. *Nephron - Clinical Practice*, 108(3).
- Makris, K. & Spanou, L. 2016. Acute Kidney Injury: Definition, Pathophysiology and Clinical Phenotypes. *Clin Biochem Rev*, 37(2): 85–98. <http://www.ncbi.nlm.nih.gov/pubmed/28303073> 9 February 2020.

- Malhotra, R., Bouchard, J. & Mehta, R.L. 2019. *Community- and Hospital-Acquired Acute Kidney Injury*. Third Edit. <https://doi.org/10.1016/B978-0-323-44942-7.00012-1>.
- Martensson, J. & Bellomo, R.R. 2014. The rise and fall of NGAL in acute kidney injury. *Blood Purif*, 37(4): 304–310.
- Matsumoto, T. & Kumazawa, J. 1993. Urinary tract infection. *Nippon rinsho. Japanese journal of clinical medicine*, 51 Suppl: 492–502.
- Mehran, R., Aymong, E., Nikolsky, E. & Lasic, Z. 2004. A Simple Risk Score for Prediction of Contrast-Induced Nephropathy After Percutaneous Coronary Intervention. *J Am Coll Cardiol*, 44(7): 1393–1399. <http://dx.doi.org/10.1016/j.jacc.2004.06.068>.
- Murat, S.N., Kurtul, A. & Yarlioglues, M. 2015. Impact of Serum Albumin Levels on Contrast-Induced Acute Kidney Injury in Patients with Acute Coronary Syndromes Treated with Percutaneous Coronary Intervention. *Angiology*, 66(8): 732–737.
- Myers, G.L., Miller, W.G., Coresh, J., Fleming, J., Greenberg, N., Greene, T., Hostetter, T., Levey, A.S., Panteghini, M., Welch, M. & Eckfeldt, J.H. 2006. Recommendations for Improving Serum Creatinine Measurement : A Report from the Laboratory Working Group of the National Kidney Disease Education Program. *Clinical Chemistry*, 18: 5–18.
- NICE. 2014. The NGAL Test for early diagnosis of acute kidney injury. : 1–35. <http://publications.nice.org.uk/the-ngal-test-for-early-diagnosis-of-acute-kidney-injury-mib3/technology-overview>.
- Nickolas, T.L., Schmidt-Ott, K.M., Canetta, P., Forster, C., Singer, E., Sise, M., Elger, A., Maarouf, O., Sola-Del Valle, D.A., O'Rourke, M., Sherman, E., Lee, P., Geara, A., Imus, P., Guddati, A., Polland, A., Rahman, W., Elitok, S., Malik, N., Giglio, J., El-Sayegh, S., Devarajan, P., Hebbar, S., Saggi, S.J., Hahn, B., Kettritz, R., Luft, F.C. & Barasch, J. 2012. Diagnostic and prognostic stratification in the emergency department using urinary biomarkers of nephron damage: A multicenter prospective cohort study. *JACC*, 59(3): 246–255.
- Ning, L., Li, Z., Wei, D., Chen, H., Yang, C., Wu, D., Wang, Y. & Zhang, J. 2018. Urinary semaphorin 3A as an early biomarker to predict contrast-induced acute kidney injury in patients undergoing percutaneous coronary intervention. *Braz J Med Biol Res*, 51(4): 1–8.
- Ning, M., Mao, X., Niu, Y., Tang, B. & Shen, H. 2018. Usefulness and limitations of neutrophil gelatinase-associated lipocalin in the assessment of kidney diseases. *J Lab Precis Med*, 3(3): 1–10.
- Nusca, A., Miglionico, M., Proscia, C., Ragni, L., Carassiti, M., Pepe, F.L. & Sciascio, G. Di. 2018. Early prediction of contrast-induced acute kidney injury by a 'bedside' assessment of Neutrophil Gelatinase-Associated Lipocalin during elective percutaneous coronary interventions. *PLOS ONE*, 13(5): 1–12.
- Okusa, M.D. & Davenport, A. 2013. Reading between the (guide)lines - The KDIGO practice guideline on acute kidney injury in the individual patient. *Kidney Int*, 85(1): 39–48. <http://dx.doi.org/10.1038/ki.2013.378>.

- Oweis, A.O., Alshelleh, S.A., Saadeh, N., Jarrah, M.I., Ibdah, R. & Alzoubi, K.H. 2020. Long-Term Follow-Up of Contrast-Induced Acute Kidney Injury: A Study from a Developing Country. *Int. J. Vasc. Med*, 2020: 15–20.
- Ozkok, S. & Ozkok, A. 2017. Contrast-induced acute kidney injury: A review of practical points. *World J Nephrol* 2017; 6(3): 86–99.
- Parikh, A., Rizzo, J.A., Canetta, P., Forster, C., Sise, M., Maarouf, O., Singer, E., Elger, A., Elitok, S., Schmidt-ott, K., Barasch, J. & Nickolas, T.L. 2017. Does NGAL reduce costs? A cost analysis of urine NGAL (uNGAL) & serum creatinine (sCr) for acute kidney injury (AKI) diagnosis. *PLOS ONE*, 12(5): 1–16.
- Perrin, T., Descombes, E. & Cook, S. 2012. Contrast-induced nephropathy in invasive cardiology: Incidence, pathophysiology, diagnosis, prevention and prognosis. *Swiss Med Wkly.*, 142: 1–11.
- Pistolesi, V., Regolisti, G., Morabito, S., Gandolfini, I., Corrado, S., Piotti, G. & Fiaccadori, E. 2018. Contrast medium induced acute kidney injury : a narrative review. *J. Nephrol*, 31(6): 797–812. <http://dx.doi.org/10.1007/s40620-018-0498-y>.
- Ralib, A.M., Pickering, J.W., Shaw, G.M., Devarajan, P., Edelstein, C.L., Bonventre, J. V. & Endre, Z.H. 2012. Test characteristics of urinary biomarkers depend on quantitation method in acute kidney injury. *J Am Soc Nephrol*, 23(2): 322–333. www.jasn.org 11 February 2020.
- Reyes, L.F., Severiche-Bueno, D.F., Bustamante, C.A., Murillo, S., Soni, N.J., Poveda, M., Gomez, E., Buitrago, R. & Rodriguez, A. 2020. Serum levels of neutrophil Gelatinase associated Lipocalin (NGAL) predicts hemodialysis after coronary angiography in high risk patients with acute coronary syndrome. *BMC Nephrology*, 21(1): 1–9.
- Rivandi, J. & Yonata, A. 2015. Hubungan Diabetes Melitus Dengan Kejadian Gagal Ginjal Kronik. *Jurnal Majority*, 4(9): 27–34. <http://juke.kedokteran.unila.ac.id/index.php/majority/article/view/1404/1246>
- Ronco, F., Tarantini, G. & McCullough, P.A. 2020. Contrast induced acute kidney injury in interventional cardiology: An update and key guidance for clinicians. *Rev. Cardiovasc. Med*, 21(1): 9–23.
- Seferovic, J.P., Tesic, M., Lezaic, V., Seferovic, P.M. & Lalic, N.M. 2021. Contrast-induced nephropathy in a patient with type 2 diabetes and coronary artery disease : a case report. *Int. J. Med. Res.*, 49(8): 1–6.
- Seibert, F.S., Heringhaus, A., Pagonas, N., Rudolf, H., Rohn, B., Bauer, F., Timmesfeld, N., Trappe, H.J., Babel, N. & Westhoff, T.H. 2020. Biomarkers in the prediction of contrast media induced nephropathy – the BITCOIN study. *PLoS ONE*, 15(7): 1–12. <http://dx.doi.org/10.1371/journal.pone.0234921>.
- Silvain, J., Nguyen, L.S., Spagnoli, V., Kerneis, M., Guedeney, P., Vignolles, N., Cosker, K., Barthelemy, O., Le Feuvre, C., Helft, G., Collet, J.P. & Montalescot, G. 2018. Contrast-induced acute kidney injury and mortality in ST elevation myocardial infarction treated with primary percutaneous coronary intervention. *Heart*, 104(9): 767–772.

- Smertka, M. & Chudek, J. 2012. Using NGAL as an early diagnostic test of acute kidney injury. *Renal Failure*, 34(1): 130–133.
- Song, J.S., Kim, S. Il, Kim, W., Park, D.W., Kwak, H.J., Moon, J.Y., Kim, S.H., Kim, T.H., Sohn, J.W., Shin, D.H., Park, S.S. & Yoon, H.J. 2013. Incidence and risk factors of contrast-induced nephropathy after bronchial arteriography or bronchial artery embolization. *Tuberculosis and Respiratory Diseases*, 74(4): 163–168.
- Souza, D.F., Reis, S.S.A., Botelho, R. V. & Ferreira-Filho, S.R. 2015. Relative and Absolute Changes in Urinary Neutrophil Gelatinase-Associated Lipocalin and Correlation with Small Increases in Serum Creatinine Levels after Coronary Angiography: An Observational Study. *Nephron*, 129(2): 84–90.
- Stucchi, M., Cantoni, S., Piccinelli, E., Savonitto, S. & Morici, N. 2018. Anemia and acute coronary syndrome: Current perspectives. *Vasc Health Risk Manag*, 14: 109–118.
- System, A. 2013. Urine NGAL. : 1–7.
- Tang, K.W.A., Toh, Q.C. & Teo, B.W. 2015. Normalisation of urinary biomarkers to creatinine for clinical practice and research – When and why. *Singapore Med J*, 56(1): 7–10.
- Tasanarong, A., Hutayanon, P. & Piyayotai, D. 2013. Urinary Neutrophil Gelatinase-Associated Lipocalin predicts the severity of contrast-induced acute kidney injury in chronic kidney disease patients undergoing elective coronary procedures. *BMC Nephrol*, 14: 1–12.
- Tebaldi, M., Valgimigli, M., Campo, G., Gambetti, S., Bristot, L., Monti, M. & Ferrari, R. 2013. Determination of the Urinary Neutrophil Gelatinase–Associated Lipocalin As an Early Marker of Contrast Induced Acute Kidney Injury After Coronary Catheterization. *JACC*, 61(10).
- Thomas, D., Zachariah, S., Elamin, A., Elamin, E., Luay, A., Hashim, O. & Thomas, D. 2017. Limitations of serum creatinine as a marker of renal function. *Scholars Academic Journal of Pharmacy (SAJP)*, (January 2020).
- Tonomura et al, Y. 2014. Biomarkers in Urine and Use of Creatinine. *Springer Sci*: 1–18.
- Torregrosa, I., Montoliu, C., Urios, A., Andrés-Costa, M.J., Giménez-Garzó, C., Juan, I., Puchades, M.J., Blasco, M.L., Carratalá, A., Sanjuán, R. & Miguel, A. 2015. Urinary KIM-1, NGAL and L-FABP for the diagnosis of AKI in patients with acute coronary syndrome or heart failure undergoing coronary angiography. *Heart Vessels*, 30(6): 703–711.
- Westgard, J. 2014. Desirable Specifications for Total Error , Imprecision , and Bias , derived from intra- and inter-individual biologic variation. *QUALITY REQUIREMENT*.
- Westgard, S., Bayat, H. & Westgard, J. 2018. Analytical Sigma metrics: A review of Six Sigma implementation tools for medical laboratories. *Biochem Med*, 28(2): 1–9.
- Widaningsih, Y., Natsir, R., Arif, M., Bahrin, U., Kasim, H., Mangerangi, F., Kadir, N.A., Anggraeni, R., Haruna, N., Hatta, M. & Usman, A.N. 2017. Analysis of Risk Factors Contrast Induced Nephropathy in Coronary Artery

Disease Patients Obtained Percutaneous Coronary Intervention at Wahidin Sudirohusodo Hospital in Makassar, South Sulawesi. *IJSBAR*, 33(1): 145–150. <http://gssrr.org/index.php?journal=JournalOfBasicAndApplied>.
Yim, H.E. 2015. Neutrophil Gelatinase-Associated Lipocalin and Kidney Diseases. *Child Kidney Dis*, 19(2): 79–88.