

DAFTAR PUSTAKA

- Aamri, E. and Basnawi, A. (2017) 'Effects of Anesthesia & Anesthetic techniques on Cellular Immunity', *Journal of Anesthesia & Critical Care: Open Access*, 7(6). doi: 10.15406/jaccoa.2017.07.00283.
- Arias, J.-I., Aller, M.-A. and Arias, J. (2009) 'Surgical inflammation: a pathophysiological rainbow', *Journal of Translational Medicine*, 7(1), p. 19. doi: 10.1186/1479-5876-7-19.
- Bilir, B., Altıntaş, N., Aydın, M., Oran, M., Özsu, S. and Tutar, Ü. (2016) 'The Predictive Role of Neutrophil to Lymphocyte ratio in Chronic Obstructive Pulmonary Disease', *Electronic Journal of General Medicine*, 13(2). doi: 10.15197/ejgm.1554.
- Blais, V., Zhang, J. and Rivest, S. (2002) 'In altering the release of glucocorticoids, ketorolac exacerbates the effects of systemic immune stimuli on expression of proinflammatory genes in the brain', *Endocrinology*, 143(12), pp. 4820–4827. doi: 10.1210/en.2002-220598.
- Bueno, B. G., L, J., M, M., G, B., Nievas, P. and Carlos Leza, J. (2008) 'Stress Mediators Regulate Brain Prostaglandin Synthesis and Peroxisome Proliferator-Activated Receptor- γ Activation after Stress in Rats', *The Endocrine Society*, 149(4), pp. 1969–1978. doi: 10.1210/en.2007-0482.

Chow, G. K., Fabrizio, M. D., Steer, T., Potter, S. R., Jarrett, T. W., Gelman, S., *et al.* (2001) 'Prospective Double-Blind Study of Effect of Ketorolac Administration after Laparoscopic Urologic Surgery', *Journal of Endourology*, 15(2), pp. 171–174. doi: 10.1089/089277901750134502.

Cruz, F. F., Rocco, P. R. M. and Pelosi, P. (2017) 'Anti-inflammatory properties of anesthetic agents', *Critical Care*, 21(1), p. 67. doi: 10.1186/s13054-017-1645-x.

Dahlan, M. S. (2018) *Statistik untuk Kedokteran dan Kesehatan*. 6 th. Jakarta Timur: PT Epidemiologi Indonesia.

Desborough, J. P. (2000) 'The stress response to trauma and surgery', *British Journal of Anaesthesia*, 85(1), pp. 109–117. doi: 10.1093/bja/85.1.109.

Dilektasli, E., Inaba, K., Haltmeier, T., Wong, M. D., Clark, D., Benjamin, E. R., *et al.* (2016) 'The prognostic value of neutrophil-to-lymphocyte ratio on mortality in critically ill trauma patients', *Journal of Trauma and Acute Care Surgery*, 81(5), pp. 882–888. doi: 10.1097/TA.0000000000000980.

Dobson, G. P. (2015) 'Addressing the Global Burden of Trauma in Major Surgery', *Frontiers in Surgery*, 2. doi: 10.3389/fsurg.2015.00043.

Duchesne, J. C., Tatum, D., Jones, G., Davis, B., Robledo, R., DeMoya, M., *et al.* (2017) 'Multi-institutional analysis of neutrophil-to-lymphocyte ratio (NLR) in

patients with severe hemorrhage: A new mortality predictor value', *Journal of Trauma and Acute Care Surgery*, 83(5), pp. 888–893. doi: 10.1097/TA.0000000000001683.

Feher, J. (2012) 'White Blood Cells and Inflammation', in *Quantitative Human Physiology*. Elsevier, pp. 437–445. doi: 10.1016/B978-0-12-382163-8.00046-3.

Forget, P., Bentin, C., Machiels, J.-P., Berliere, M., Coulie, P. G. and De Kock, M. (2014) 'Intraoperative use of ketorolac or diclofenac is associated with improved disease-free survival and overall survival in conservative breast cancer surgery', *British Journal of Anaesthesia*, 113, pp. i82–i87. doi: 10.1093/bja/aet464.

Forget, P., Machiels, J.-P., Coulie, P. G., Berliere, M., Poncelet, A. J., Tombal, B., *et al.* (2013) 'Neutrophil:Lymphocyte Ratio and Intraoperative Use of Ketorolac or Diclofenac are Prognostic Factors in Different Cohorts of Patients Undergoing Breast, Lung, and Kidney Cancer Surgery', *Annals of Surgical Oncology*, 20(S3), pp. 650–660. doi: 10.1245/s10434-013-3136-x.

Giakoumidakis, K., Fotos, N., Patelarou, A., Theologou, S., Argiriou, M., Chatziefstratiou, A., *et al.* (2017) 'Perioperative neutrophil to lymphocyte ratio as a predictor of poor cardiac surgery patient outcomes', *Pragmatic and Observational Research*, Volume 8, pp. 9–14. doi: 10.2147/POR.S130560.

Guner, A. and Kim, H.-I. (2019) 'Biomarkers for Evaluating the Inflammation Status in Patients with Cancer', *Journal of Gastric Cancer*, 19(3), p. 254. doi: 10.5230/jgc.2019.19.e29.

Hall, J. E. (2016) *Guyton and Hall textbook of medical physiology*. 13th edition. Philadelphia, PA: Elsevier.

Hegarty, N. and Dasgupta, P. (2008) 'Immunological aspects of minimally invasive oncologic surgery', *Current Opinion in Urology*, 18(2), pp. 129–133. doi: 10.1097/MOU.0b013e3282f517fc.

Helander, E. M., Webb, M. P., Menard, B., Prabhakar, A., Helmstetter, J., Cornett, E. M., *et al.* (2019) 'Metabolic and the Surgical Stress Response Considerations to Improve Postoperative Recovery', *Current Pain and Headache Reports*, 23(5), p. 33. doi: 10.1007/s11916-019-0770-4.

Helmy, S. A. K., Wahby, M. A. M. and El-Nawaway, M. (1999) 'The effect of anaesthesia and surgery on plasma cytokine production', *Anaesthesia*, 54(8), pp. 733–738. doi: 10.1046/j.1365-2044.1999.00947.x.

Hong, J.-Y. (2005) 'The Effect of Preoperative Ketorolac on WBC Response and Pain in Laparoscopic Surgery for Endometriosis', *Yonsei Medical Journal*, 46(6), pp. 812–817. doi: 10.3349/ymj.2005.46.6.812.

Howard, R., Kanetsky, P. A. and Egan, K. M. (2019) ‘Exploring the prognostic value of the neutrophil-to-lymphocyte ratio in cancer’, *Scientific Reports*, 9(1), p. 19673. doi: 10.1038/s41598-019-56218-z.

Iwasaki, M., Edmondson, M., Sakamoto, A. and Ma, D. (2015) ‘Anesthesia, surgical stress, and “long-term” outcomes’, *Acta Anaesthesiologica Taiwanica*, 53(3), pp. 99–104. doi: 10.1016/j.aat.2015.07.002.

Jaramillo-Reta, K. Y., Velázquez-Dohorn, M. E. and Medina-Franco, H. (no date) ‘Neutrophil to Lymphocyte Ratio as Predictor of Surgical Mortality and Survival in Complex Surgery of the Upper Gastrointestinal Tract’, p. 5.

Kastilong, M. (2018) ‘Neutrophil Lymphocyte Ratio and Head Injury Outcome’, 1(2), p. 9.

Katzung, B. (2018) *Basic & Clinical Pharmacology*. 14 th. United States of America: McGraw-Hill Education.

Kaye, A. D., Patel, N., Bueno, F. R., Hymel, B., Vadivelu, N., Kodumudi, G., *et al.* (2014) ‘Effect of Opiates, Anesthetic Techniques, and Other Perioperative Factors on Surgical Cancer Patients’, 14(2), p. 13.

Kelbel, I. and Weiss, M. (2001) ‘Anaesthetics and immune function’, *Current Opinion in Anaesthesiology*, 14(6), pp. 685–691. doi: 10.1097/00001503-200112000-00015.

Kim, W. H., Jin, H. S., Ko, J. S., Hahm, T. S., Lee, S. M., Cho, H. S., *et al.* (2011) ‘The effect of anesthetic techniques on neutrophil-to-lymphocyte ratio after laparoscopy-assisted vaginal hysterectomy’, *Acta Anaesthesiologica Taiwanica*, 49(3), pp. 83–87. doi: 10.1016/j.aat.2011.08.004.

Li, J., Chen, Q., Luo, X., Hong, J., Pan, K., Lin, X., *et al.* (2015) ‘Neutrophil-to-Lymphocyte Ratio Positively Correlates to Age in Healthy Population: NLR Correlates to Age’, *Journal of Clinical Laboratory Analysis*, 29(6), pp. 437–443. doi: 10.1002/jcla.21791.

Macario, A. and Lipman, A. G. (2001) ‘Ketorolac in the Era of Cyclo-Oxygenase-2 Selective Nonsteroidal Anti-Inflammatory Drugs: A Systematic Review of Efficacy, Side Effects, and Regulatory Issues’, *Pain Medicine*, 2(4), pp. 336–351. doi: 10.1046/j.1526-4637.2001.01043.x.

Maha Udiyana, N. D., Kusuma Duarsa, G. W. and Bagus Mahadewa, T. G. (2018) ‘Hubungan Rasio Neutrofil Limfosit dengan Derajat Inflamasi dan Agresivitas Prostat’, *Medicina*, 49(2). doi: 10.15562/medicina.v49i2.178.

Marana, E., Colicci, S., Meo, F., Marana, R. and Proietti, R. (2010) ‘Neuroendocrine stress response in gynecological laparoscopy: TIVA with propofol versus sevoflurane anesthesia’, *Journal of Clinical Anesthesia*, 22(4), pp. 250–255. doi: 10.1016/j.jclinane.2009.07.011.

Melamed, R., Bar-Yosef, S., Shakhar, G., Shakhar, K. and Ben-Eliyahu, S. (2003) ‘Suppression of Natural Killer Cell Activity and Promotion of Tumor Metastasis by Ketamine, Thiopental, and Halothane, but Not by Propofol: Mediating Mechanisms and Prophylactic Measures’, *Anesthesia & Analgesia*, pp. 1331–1339. doi: 10.1213/01.ANE.0000082995.44040.07.

Ong, K. S., Seymour, R. A., Chen, F. G. and Ho, V. C. L. (2004) ‘Preoperative ketorolac has a preemptive effect for postoperative third molar surgical pain’, *International Journal of Oral and Maxillofacial Surgery*, 33(8), pp. 771–776. doi: 10.1016/j.ijom.2004.01.020.

Osafo, N., Agyare, C., Obiri, D. D. and Antwi, A. O. (2017) ‘Mechanism of Action of Nonsteroidal Anti-Inflammatory Drugs’, in Al-kaf, A. G. A. (ed.) *Nonsteroidal Anti-Inflammatory Drugs*. InTech. doi: 10.5772/68090.

Paruk, F. and Chausse, J. M. (2019) ‘Monitoring the post surgery inflammatory host response’, *Journal of Emergency and Critical Care Medicine*, 3, pp. 47–47. doi: 10.21037/jeccm.2019.08.06.

Reuben, S. S. (2009) ‘PERIOPERATIVE USE OF COX-2 AGENTS’, in *Current Therapy in Pain*. Elsevier, pp. 59–72. doi: 10.1016/B978-1-4160-4836-7.00009-2.

Scholl, R., Bekker, A. and Babu, R. (2012) ‘Neuroendocrine and Immune Responses to Surgery’, p. 8.

Shavit, Y., Weidenfeld, J., DeKeyser, F. G., Fish, G., Wolf, G., Mayburd, E., *et al.* (2005) 'Effects of surgical stress on brain prostaglandin E2 production and on the pituitary–adrenal axis: Attenuation by preemptive analgesia and by central amygdala lesion', *Brain Research*, 1047(1), pp. 10–17. doi: 10.1016/j.brainres.2005.04.003.

Sherwood, L. (2004) *Fisiologi Manusia Dari Sel ke Sistem*. 6 th. Jakarta: Penerbit Buku Kedokteran - ECG.

Silberman, S., Abu-Yunis, U., Tauber, R., Shavit, L., Grenader, T., Fink, D., *et al.* (2018) 'Neutrophil-Lymphocyte Ratio: Prognostic Impact in Heart Surgery. Early Outcomes and Late Survival', *The Annals of Thoracic Surgery*, 105(2), pp. 581–586. doi: 10.1016/j.athoracsur.2017.07.033.

Suranadi, I. W., Senapathi, T. G. A., Wisnawa, A. D. F. and Ryalino, C. (2020) 'Pre-operative Neutrophil-to-Lymphocyte Ratio is Associated with Post-operative Opioid Requirements and Length of Stay after Thoracotomy', *Open Access Macedonian Journal of Medical Sciences*, 8(B), pp. 1000–1004. doi: 10.3889/oamjms.2020.5300.

Surhonne, N., Hebri, C., Kannan, S., Duggappa, D. R., Rs, R. R. and Mapari, C. G. (2019) 'The effect of anesthetic techniques on neutrophil to lymphocyte ratio in patients undergoing infraumbilical surgeries', *Korean Journal of Anesthesiology*, 72(5), pp. 458–465. doi: 10.4097/kja.d.19.00022.

Tan, T. P., Arekapudi, A., Metha, J., Prasad, A. and Venkatraghavan, L. (2015) 'Neutrophil-lymphocyte ratio as predictor of mortality and morbidity in cardiovascular surgery: a systematic review: Neutrophil-lymphocyte ratio', *ANZ Journal of Surgery*, 85(6), pp. 414–419. doi: 10.1111/ans.13036.

Watt, D. G., Horgan, P. G. and McMillan, D. C. (2015) 'Routine clinical markers of the magnitude of the systemic inflammatory response after elective operation: A systematic review', *Surgery*, 157(2), pp. 362–380. doi: 10.1016/j.surg.2014.09.009.

Wu, L. (2019) 'Neutrophil-to-lymphocyte and platelet-to-lymphocyte ratio in Chinese Han population from Chaoshan region in South China', p. 5.

Yuki, K., Matsunami, E., Tazawa, K., Wang, W., DiNardo, J. A. and Koutsogiannaki, S. (2017) 'Pediatric Perioperative Stress Responses and Anesthesia', p. 17.