

DAFTAR PUSTAKA

- Angus, D.C., van der Poll, T., 2013. Severe sepsis and septic shock. *N Engl J Med.* **369(9)**:840-851.
- Annane, D., Bellissant, E., Cavaillon, J.M., 2005. Septic shock. *Lancet.* **365**: 63-78.
- Artero, A., Zaragoza, R., Camarena, J.J., Sancho, S., Gonzalez, R., Noguiera, J.M., 2010. Prognostic factors of mortality in patients with community-acquired bloodstream infection with severe sepsis and septic shock. *Journal of Critical Care.* **25**: 276-281.
- Asdie, R.H., Octavianto, R.A., Pasaribu, F.Z., Wirawan, A.D., Murti, W.W., Suharyanto, *et al.*, 2017. In: Nirwati H, Annisa L, editors. Kultur Darah, Skor SOFA, dan SAPS II untuk Memprediksi Tingkat Keparahan dan Kematian akibat Sepsis. *Proceedings of Annual Scientific Meeting (ASM) Pokja Mikrobiologi*; 2017 April 07; Yogyakarta: Departemen Mikrobiologi Fakultas Kedokteran Universitas Gadjah Mada, Yogyakarta.
- Blume, J., Douglas, S.D., Evans, D.L., 2011. Immune Supression and Immune Activation in Depression. *Brain Vehav Immun.* **25 (2)**: 221-229.
- Bonilla, F.A., Oettgen, H.C., 2010. Adaptive Immunity. *J Allergy Clin Immunol*, **125**: S33-40.
- Boomer, J.S., To, K., Chang, K.C., Takasu, O., Osborne, D.F., Walton, A.H., *et al.*, 2011. Immunosuppression in patients who die of sepsis and multiple organ failure. *JAMA*, **306 (23)**: 2594-2605.
- Chaplin, D.D., 2010. Overview of the immune response. *J Allergy Clin Immunol.* **125**: S3-23.
- Chatterjee, S., Bhattacharya, M., Todi, S.K., 2017. Epidemiology of Adult-population Sepsis in India: A Single Center 5 Year Experience. *Indian j Crit Care Med*, **21(9)**: 573-577.
- Chen, X.H, Yin, Y.J., Zhang, X.J., 2011. Sepsis and immune response, *World J EmergMed*, **2(2)**.
- Chung, K.P., Chang, H.T., Lo, S.C., Chang, L.Y., Lin, S.Y., Cheng, A., *et al.*, 2015. Severe lymphopenia is associated with elevated plasma interleukin-15 levels and increased mortality during severe sepsis. *Shock.* **43**:569–575.

- Condotta, S.A., Cabrera-Perez, J., Badovinac, V.P., Griffith, T.S., 2013. T-cell mediated immunity and the role of TRAIL in sepsis-induced immunosuppression. *Crit Rev Immunol*. **33 (1)**: 23-40.
- de Jager, C., van Wijk, P., Mathoera, R.B., de Jongh-Leuvenink, J., van der Poll, T., Wever, P.C., 2010. Lymphocytopenia and neutrophil-lymphocyte count ratio predict bacteremia better than conventional infection markers in an emergency care unit. *Critical Care*. **14(5)**:192.
- Dellinger, R.P., Levy, M.M., Rhodes, A., Annane, D., Gerlach, H., Opal, S.M. 2012. Surviving sepsis campaign: international guidelines for management of severe sepsis and septic shock, 2012. *Intensive care medicine*. **39(2)**: 165–228.
- Drewry, A.M., Samra, N., Skrupky, L.P., Fuller, B.M., Compton, S.M., Hotchkiss, R.S., 2014. Persistent Lymphopenia after diagnosis of sepsis predicts mortality. *Shock*. **42 (5)**: 383-39.
- Esper, A.M., Moss, M., Martin, G., 2009. The effect of diabetes mellitus on organ dysfunction with sepsis: an epidemiological study. *Crit Care* **13(1)**:R18
- Felmet, K.A., Hall, M.W., Clark, R.S., Jaffe, R., Carcillo, J.A., 2005. Prolonged lymphopenia, lymphoid depletion, and hypoprolactinemia in children with nosocomial sepsis and multiple organ failure. *J Immunol*. **174(6)**: 3765-3772.
- Finfer, S., Bellomo, R., McEvoy, S., Lo, S.K., Myburgh, J., Neal, B., *et al.*, 2006. Effect of baseline serum albumin concentration on outcome of resuscitation with albumin or saline in patients in intensive care units: analysis of data from the saline versus albumin fluid evaluation (SAFE) study. *BMJ*. **333(7577)**:1044.
- Fleischmann, C., Scherag, A., Adhikari, N.K.J., Hartog, C.S., Tsaganos, T., Schlattmann, P., *et al.*, 2016. Assessment of global incidence and mortality of hospital-treated sepsis. Current estimates and limitations. *Am J Respir Crit Care Med*. **193**:259–272.
- Fleischmann, C., Thomas-Rueddel, D.O., Hartmann, N., Hartog, C.S., Welte, T., Heublein, S., *et al.*, 2016. Hospital incidence and mortality rates of sepsis-an analysis of hospital episode (DRG) statistics in Germany from 2007 to 2013. *Dtsch Arztebl Int*. **113**:159-166.
- Freishtat, R. J., Natale, J., Benton, A.S., Cohen, J., Sharron, M., Wiles, A.A., *et al.*, 2009. Sepsis Alters the Megakaryocyte-Platelet Transcriptional axis Resulting in Granzyme B Lymphotoxicity. *Am J Resp Crit Care Med*. **179**:

467-473.

- Gatta, A., Verardo, A., Bolognesi, M., 2012. Hypoalbuminemia. *Intern EmeRg Med.* **7(Suppl 3)**: S193-199.
- Gauer, R.L., 2013. Early Recognition and Management of Sepsis in Adults: The First Six Hours. *Am Fam Physician.* **88(1)**:44-53.
- Gaudio, A.R., 2009. *Severe sepsis* in OH's Intensive Care Manual (6th). Elsevier, Philadelphia. Pp. 730.
- Garcia-Rizo, C., Gernandez-Egea, E., Miller, B.J., Oliviera, C., Justicia, A., Griffith, J.K., *et al.*, 2012. Abnormal glucose tolerance, white blood cell count, and telomere length in newly diagnosed, antidepressant-naïve patients with depression. *Brain, Behavior and Immunity.* **28**: 49-53
- Girardot, T., Rimmele, T., Venet, F., Monneret, G., 2017. Apoptosis-induced lymphopenia in sepsis and other severe injuries. *Apoptosis.* **22**:295-305
- Hotchkiss, R.S., Tinsley, K.W., Swanson, P.E., Schmieg, R.E.Jr., Hui, J.J., Chang K.C., *et al.*, 2001. Sepsis-induced apoptosis causes progressive profound depletion of B and CD4⁺ T lymphocytes in humans. *J Immunol.* **166**: 6952–6963.
- Hutchins, N.A., Usinger, J., Hotchkiss, R.S., Ayala, A., 2014. The new normal: immunomodulatory agents against sepsis immune suppression. *Trends in molecular medicine.* **20 (4)**: 224-233.
- Inoue, S., Suzuki-Utsunomiya, K., Okada, Y., Taira, T., Iida, Y., Miura, N., *et al.*, 2013. Reduction of immunocompetent T cells followed by prolonged lymphopenia in severe sepsis in the elderly. *Crit Care.* **41(3)**: 810-819.
- Kaukonen, K., Bailey, M., Suzuki, S., Pilcher, D., Bellomo, R., 2014. Mortality Related to Severe Sepsis and Septic Shock Among Critically Ill Patients in Australia and New Zealand, 2000-1012. *JAMA.* **311 (13)**: 1308-1316.
- Le Tulzo, Y., Pangault, C., Gacouin, A., Guilloux, V., Tribut, O., Amiot, L., *et al.*, 2002. Early circulating lymphocyte apoptosis in human septic shock is associated with poor outcome. *Shock.* **18**:487–494.
- Lindvig, K.P., Nielsen, S.L., Henriksen, D.P., Jensen, T.G., Kolmos, H.J., Pedersen, C., *et al.*, 2016. Mortality and prognostic factors of patients who have blood cultures performed in the emergency department: a cohort study. *European Journal of Emergency Medicine.* **23**: 166-172.
- Lipsky, B.A., Tabak, Y.P., Johannes, R.S., Vo, L., Hyde, L., Weigelt, J.A., 2010.

Skin and soft tissue infections in hospitalised patients with diabetes: culture isolates and risk factors associated with mortality, length of stay and cost. *Diabetologia*. **53**: 914-923.

- Liu, X., Shen, Y., Wang, H., Ge, Q., Fei, A., Pan, S., 2016. Prognostic Significance of Neutrophil-to-Lymphocyte Ratio in Patients with Sepsis: A Prospective Observational Study. *Mediators of Inflammation-Hindawi*, 1-8.
- Luan, Y., Yin, C., Qin, Q., Dong, N., Zhu, X., Sheng, Z., *et al.*, 2015. Effect of regulatory T cells on promoting apoptosis of T lymphocyte and its regulatory mechanism in sepsis. *J Interferon Cytokine Res*. **35**:969–980.
- Macia-Rodriguez, C., Alende-Castro, V., Vazquez-Ledo, L., Novo Velero, I., Gonzalez-Quintela, A., 2017. Skin and soft-tissue infections: Factors associated with mortality and re-admissions. *Enferm Infecc Microbiol Clin*. **35 (2)**: 76-81.
- Mansur, A., Klee, Y., Popov, A.F., Erlewein, J., Ghadimi, M., Beissbarth, T., *et al.*, 2015. Primary bacteraemia is associated with a higher mortality risk compared with pulmonary and intra-abdominal infections in patients with sepsis: a prospective observational cohort study. *BMJ Open*. **5**:e006616.
- Mazzone, A., Dentali, F., Regina, M.L., Foglia, E., Gambarcota, M., Garagiola, E., *et al.*, 2016. Clinical Features, Short-Term Mortality, and Prognostic Risk Factors of Septic Patients admitted to Internal Medicine Units. *Medicine*. **95 (4)**:1-5.
- O'Brien, J.M., Ali, N.A., Aberegg, S., Abraham, E., 2007. Sepsis. *The American Journal of Medicine*. **120**: 1012-1022.
- Otto, G.P., Sossdorf, M., Claus, R.A., Rodel, J., Menge, K., Reinhart, K., *et al.*, 2011. The late phase of sepsis is characterized by an increased microbiological burden and death rate. *Critical Care*. **15**: R183.
- Polat, G., Ugan, R.A., Cardici, E., Halici, Z., 2017. Sepsis and septic shock: current treatment strategies and new approaches. *The Eurasian Journal of Medicine*. **49**: 53-8
- Provan, D., Singer, C.R.J., Baglin, T., Lilleyman, J., 2004. *Reduced White Blood Count* in Oxford Handbook of Clinical Haematology (2nd ed), pp 16-19. Oxford University Press, Oxford.
- Reinhart, K., Bloos, F., Brunkhorst, F.M., 2005. Pathophysiology of sepsis and multiple organ dysfunction. In *Textbook of Critical Care*. Fifth Edition. pp1249-58. Elsevier Saunders. Philadelphia.

- Roger, P.M., Hyvernath, H., Breittmayer, J.P., Dunais, B., Dellamonica, J., Bernardin, G., *et al.*, 2009. Enhanced T-cell apoptosis in human septic shock is associated with alteration of the costimulatory pathway. *Eur. J. Clin. Microbiol. Infect. Dis.* **28**:575–84.
- Salazar, O.F., Lopez, M.N., Mendoza, N.A., 2007. Paradoxical effects of cytokines in tumor immune surveillance and tumor escape. *Cytokine Growth Factor Rev.* **18**: 171–182.
- Sankar, V., Webster, N.R., 2012. Clinical application of sepsis biomarker. *J Anesth.* **27**: 269-283.
- Stearns-Kurosawa, D.J., Osuchowski, M.F., Valentine, C., Kurosawa, S., Remick, D.G., 2011. The Pathogenesis of sepsis. *Annu. Rev. Pathol. Mech. Dis.* **6**: 19-48.
- Schefold, J.C., Hasper, D., Volk, H.D., Reinke, P., 2008. Sepsis: time has come to focus on the later stages. *Med Hypotheses.* **71(2)**: 203-208.
- Singer, M., Deutschman, C.S., Seymour, C.W., Shankar-Hari, M., Annane, D., Bauer, M., *et al.*, 2016, The third international consensus definitions for sepsis and septic shock (Sepsis-3). *J Am Med Assoc.* **315**:801–810.
- Unsinger, J., Kazama, H., McDonough, J.S., Hotchkiss, R.S., Ferguson, T.A., 2009. Differential lymphopenia-induced homeostatic proliferation for CD4 and CD8 T cells following septic injury. *Journal of leukocyte Biology.* **85(3)**: 382-290.
- Venet, F., Davin, F., Guignant, C., Larue, A., Cazalis, M.A., Darbon, R., *et al.*, 2010. Early assessment of leukocyte alterations at diagnosis of septic shock. *Shock.* **34**:358–363.
- Vulliamy, P.E., Perkins, Z.B., Brohi, K., Manson, J., 2016. Persistent Lymphopenia is an independent predictor of mortality in critically ill emergency general surgical patients. *Eur J Trauma Emerg Surgery.* **42**: 755-760.
- Wang, H.E., Shapiro, N.I., Griffin, R., Safford, M.M., Judd, S., Howard, G., 2012. Chronic Medical Conditions and Risk of Sepsis. *PLoS ON.* **7 (10)**: e48307.
- Ward, P.A., 2011. Immunosuppression in sepsis. *JAMA.* **306(23)**: 2618-2619.
- Yin, M., Si, L., Qin, W., Li, C., Zhang, J., Yang, H., *et al.*, 2018. Predictive Value of Serum Albumin Level for the Prognosis of Severe Sepsis Without

Exogenous Human Albumin Administration: A Prospective Cohort Study.
Journal of Intensive Care Medicine. **33 (12)**: 687-694.

Zhao, H., Heard, S.O., Mullen, M.T., Crawford, S., Goldberg, R.J., Frendl, G., *et al.*, 2012. An evaluation of the diagnostic accuracy of the 1991 American College of Chest Physicians/Society of Critical Care Medicine and the 2001 Society of Critical Care Medicine/European Society of Intensive Care Medicine/American College of Chest Physicians/American Thoracic Society/Surgical Infection Society sepsis definition. *Crit Care Med*. **40(6)**: 1700–1706.