



## DAFTAR PUSTAKA

- Anam, V., Maleedhu, P., Bhaskar, M.V. & Venugopal, L. 2016. Evaluation of Serum Procalcitonin Levels and Sequential Organ Failure Assessment Score in Assessing the Severity and Outcome of Sepsis. *International Journal of Scientific Study*, 3(10).
- Anand, D., Das, S., Ray, S., Bhargava, S. & Srivastava, L.M. 2014. Interrelationship Between Procalcitonin and Organ Failure in Sepsis. *Ind J Clin Biochem*, 29(1):93-96.
- Angus, D.C., Linde-Zwirble, W.T., Lidicker, J., Clermont, G., Carcillo, J. and Pinsky, M.R., 2001. Epidemiology of severe sepsis in the United States: analysis of incidence, outcome, and associated costs of care. *Critical care medicine*, 29(7), pp.1303-1310.
- Annane, D., Bellisant, E. & Cavaillon, J.M. 2005. Septic Shock. *Lancet*, 365(9453):63-78.
- Barbier C, Loubieres Y, Schmit C, Hayon J, Ricome JL, Jardin F, Vieillard-Baron A: Respiratory changes in inferior vena cava diameter are helpful in predicting fluid responsiveness in ventilated septic patients. *Intensive Care Med* 2004, 30(9):1740-1746.
- Bone, R.C., 1996. Sir isaac newton, sepsis, SIRS, and CARS. *Critical care medicine*, 24(7), pp.1125-1128
- Bubenek-Turconi, S.I., Craciun, M., Miclea, I. and Perel, A., 2013. Noninvasive continuous cardiac output by the Nexfin before and after preload-modifying maneuvers: a comparison with intermittent thermodilution cardiac output. *Anesthesia & Analgesia*, 117(2), pp.366-372.
- Calandra, T. and Cohen, J., 2005. The international sepsis forum consensus conference on definitions of infection in the intensive care unit. *Critical care medicine*, 33(7), pp.1538-1548.
- Casserly B, Phillips GS, Schorr C, et al. Lactate measurements in sepsis induced tissue hypoperfusion : result from the surviving sepsis campaign database. *Crit. Care Med.* 2015; 43: 567-573.
- Cecconi M, De Backer D, Antonelli M, et al. Concensus on circulatory shock and haemodynamic monitoring. Task force for the European society of intensive care med. *Intensive Care Med.* 2014; 40:1795-1815.
- Cherpanath, T.G., Hirsch, A., Geerts, B.F., Lagrand, W.K., Leeflang, M.M., Schultz, M.J. and Groeneveld, A.B., 2016. Predicting fluid responsiveness



by passive leg raising: a systematic review and meta-analysis of 23 clinical trials. *Critical care medicine*, 44(5), pp.981-991.

Coté C.J., Sui, J., Anderson, T.A., Bhattacharya S.T., Shank, E.S., Tuason, P.M., August, D.A., Zibaitis, A., Firth, P.G., Fuzaylov, G., Leeman, M.R., Mai, C.L., Roberts, Jr. J.D. 2014. Continous non-invasive cardiac output in children: is this the next generation of operating room monitors? Initial experience in 402 pediatric patients. Division of Pediatric Anesthesia, MassGeneral Hospital for Children, Massachusetts General Hospital, Boston, MA, USA. *Paediatr Anaesth*.

Dahlan, Sopiyudin., 2012. Statistik untuk kedokteran dan kesehatan. Jakarta: Epidemiologi Indonesia

Dellinger, R.P., Levy, M.M., Rhodes, A., Annane, D., Gerlach, H., Opal, S.M., Sevransky, J.E., Sprung, C.L., Douglas, I.S., Jaeschke, R. and Osborn, T.M., 2013. Surviving Sepsis Campaign: international guidelines for management of severe sepsis and septic shock, 2012. *Intensive care medicine*, 39(2), pp.165-228.

Feissel M, Michard F, Faller J-P, Teboul J-L. 2004. The respiratory variation in inferior vena cava diameter as a guide to fluid therapy. *Intensive Care Medicine* 30 1834–1837.

Gelman, S., 2008. Venous function and central venous pressurea physiologic story. *Anesthesiology: The Journal of the American Society of Anesthesiologists*, 108(4), pp.735-748.

Geerts, B.F., Aarts, L.P.H.J., Groeneveld, A.B. and Jansen, J.R.C., 2011. Predicting cardiac output responses to passive leg raising by a PEEP-induced increase in central venous pressure, in cardiac surgery patients. *British journal of anaesthesia*, 107(2), pp.150-156.

Gu, W.J., Wang, F., Bakker, J., Tang, L. and Liu, J.C., 2014. The effect of goal-directed therapy on mortality in patients with sepsis-earlier is better: a meta-analysis of randomized controlled trials. *Critical Care*, 18(5), p.570.

He, H.W., Liu, D.W., Long, Y., Wang, X.T., Chai, W.Z. and Zhou, X., 2012. The transcutaneous oxygen challenge test: a noninvasive method for detecting low cardiac output in septic patients. *Shock*, 37(2), pp.152-155.

Jabot, J., Teboul, J.L., Richard, C. and Monnet, X., 2009. Passive leg raising for predicting fluid responsiveness: importance of the postural change. *Intensive care medicine*, 35(1), p.85.

Kaml, G.J. and Davis, K.A., 2016. Surgical critical care for the patient with sepsis



- and multiple organ dysfunction. *Anesthesiology clinics*, 34(4), pp.681-696.
- Kaukonen, K.M., Bailey, M., Pilcher, D., Cooper, D.J. and Bellomo, R., 2015. Systemic inflammatory response syndrome criteria in defining severe sepsis. *New England Journal of Medicine*, 372(17), pp.1629-1638.
- Klabunde, Richard., 2012., *Cardiovascular Physiology Concepts Second Edition*. Lippincott Williams & Wilkins.
- Krige, Anton & Bland, Martin & Fanshawe, Thomas., 2016. Fluid responsiveness prediction using Vigileo FloTrac measured cardiac output changes during passive leg raise test. *Journal of Intensive Care*. 4. 10.1186/s40560-016-0188-6.
- Lakhal, K., Ehrmann, S., Benzekri-Lefevre, D., Runge, I., Legras, A., Dequin, P.F., Mercier, E., Wolff, M., Regnier, B. and Boulain, T., 2012, May. Brachial cuff measurements of blood pressure during passive leg raising for fluid responsiveness prediction. In *Annales francaises d'anesthesie et de reanimation* (Vol. 31, No. 5, pp. e67-e72). Elsevier Masson.
- Lakhal, K., Ehrmann, S., Runge, I., Benzekri-Lefèvre, D., Legras, A., Dequin, P.F., Mercier, E., Wolff, M., Régner, B. and Boulain, T., 2010. Central venous pressure measurements improve the accuracy of leg raising-induced change in pulse pressure to predict fluid responsiveness. *Intensive care medicine*, 36(6), pp.940-948.
- Levy, M.M., Fink, M.P., Marshall, J.C., Abraham, E., Angus, D., Cook, D., Cohen, J., Opal, S.M., Vincent, J.L. and Ramsay, G., 2003. 2001 sccm/esicm/accp/ats/sis international sepsis definitions conference. *Intensive care medicine*, 29(4), pp.530-538.
- Mahjoub, Yazine & Touzeau, Jérémie & Airapetian, Norair & Lorne, Emmanuel & Hijazi, Mustapha & Zogheib, Elie & Tinturier, François & Slama, Michel & Dupont, Hervé., 2010. The passive leg-raising maneuver cannot accurately predict fluid responsiveness in patients with intra-abdominal hypertension. *Critical care medicine*. 38. pp.1824-9.
- Marik, P.E., Baram, M. and Vahid, B., 2008. Does central venous pressure predict fluid responsiveness?: A systematic review of the literature and the tale of seven mares. *Chest*, 134(1), pp.172-178.
- Michard, F. and Teboul, J.L., 2002. Predicting fluid responsiveness in ICU patients: a critical analysis of the evidence. *Chest*, 121(6), pp.2000-2008.
- Miller, R.D. and Pardo, M., 2011. *Basics of Anesthesia E-Book*. Elsevier Health Sciences.



Monnet, X., Bataille, A., Magalhaes, E., Barrois, J., Le Corre, M., Gosset, C., Guerin, L., Richard, C. and Teboul, J.L., 2013. End-tidal carbon dioxide is better than arterial pressure for predicting volume responsiveness by the passive leg raising test. *Intensive care medicine*, 39(1), pp.93-100.

Monnet X, Marik P, Teboul JL. Passive Leg Raising for predicting fluid responsiveness: a systematic review and meta analysis. *Intensive Care Med*. 2016;42:1935-1947.

Monnet, X., Rienzo, M., Osman, D., Anguel, N., Richard, C., Pinsky, M.R. and Teboul, J.L., 2006. Passive leg raising predicts fluid responsiveness in the critically ill. *Critical care medicine*, 34(5), pp.1402-1407.

Monnet, X. and Teboul, J.L., 2012. Passive leg raising. In *Applied Physiology in Intensive Care Medicine* 2 (pp. 55-59). Springer, Berlin, Heidelberg.

Monnet, X. and Teboul, J.L., 2015. Passive leg raising: five rules, not a drop of fluid!. *Critical Care* 19:18

Osman, D., Ridel, C., Ray, P., Monnet, X., Anguel, N., Richard, C. and Teboul, J.L., 2007. Cardiac filling pressures are not appropriate to predict hemodynamic response to volume challenge. *Critical care medicine*, 35(1), pp.64-68.

Otto, CM., Pearlman., A.S., 2004. *Textbook of Clinical Echocardiography*. Philadelphia. USA

Parenti, N., Sangiorgi, D., Pigna, A., Coniglio, C., Cancellieri, F., Gordini, G., Di Nino, G., 2010. Distensibility index of inferior vena cava diameter in ventilated septic and trauma patients with shock. *Critical Care*, 14(Suppl 1), p125.

Parlato, M. and Cavaillon, J.M., 2015. Host response biomarkers in the diagnosis of sepsis: a general overview. In *Sepsis* (pp. 149-211). Humana Press, New York, NY.

Pierrakos, C., Velissaris, D., Scolletta, S., Heenen, S., De Backer, D. and Vincent, J.L., 2012. Can changes in arterial pressure be used to detect changes in cardiac index during fluid challenge in patients with septic shock?. *Intensive care medicine*, 38(3), pp.422-428.

Rasid, O. and Cavaillon, J.M., 2016. Recent developments in severe sepsis research: from bench to bedside and back. *Future microbiology*, 11(2), pp.293-314.

Rauch, R., Wlisch, E., Lansdell, N. Burril, N., Jones, J., Robinson, T., Block, D., Clarson, C., Filler, G., Norozi, K., 2012Non-invasive measurement of



cardiac output in obese children and adolescents: comparison of electrical cardiometry and transthoracic Doppler echocardiography. Division of Paediatric Cardiology, Department of Paediatrics, University of Western Ontario. Canada. *J Clin Monit Comput.*

Schmidt, C., Theilmeier, G., Van Aken, P., Korsmeier, S.P., Wirtz, E., Berendes, A., Hoffmeier, A., Meissner. 2005. Comparison of electrical velocimetry and transoesophageal Doppler echocardiography for measuring stroke volume and cardiac output. *British Journal of Anaesthesia.*

Singer, M., Deutschman, C.S., Seymour, C.W., Shankar-Hari, M., Annane, D., Bauer, M., Bellomo, R., Bernard, G.R., Chiche, J.D., Coopersmith, C.M., Hotchkiss, R.S., Levy, M.M., Marshall, J.C., Martin, G.S., Opal, S.M., Rubenfeld, G.D., Van der Poll, T., Vincent, J.T. & Angus, D.C. 2016. The Third International Consensus Definitions for Sepsis and Septic Shock (Sepsis-3). *JAMA*, 2(8):315.

Snowden, C. and Kirkman, E., 2002. The pathophysiology of sepsis. *Continuing Education in Anaesthesia, Critical Care & Pain*, 2(1), pp.11-14.

Soliman, R. 2017. Prediction of fluid status and survival by electrical cardiometry in septic patients with acute circulatory failure. *The Egyptian Journal of Critical Care Medicine* 5 (2017) 65–68.

Souza-Fonseca-Guimaraes, F., Cavaillon, J.M. and Adib-Conquy, M., 2013. Bench-to-bedside review: Natural killer cells in sepsis-guilty or not guilty?. *Critical care*, 17(4), p.235.

Suárez-Santamaría, M., Santolaria, F., Pérez-Ramírez, A., Alemán-Valls, M.R., Martínez-Riera, A., González-Reimers, E., de la Vega, M.J. & Milena, A. 2010. Prognostic value of inflammatory markers (notably cytokines and procalcitonin), nutritional assessment, and organ function in patients with sepsis. *Eur. Cytokine Netw.*, 21(1):19-26.

Toppen W., et al. 2018. Passive Leg Raise: Feasibility and Safety of the Maneuver in Patients with Undifferentiated Shock. *J. Intensive Care Med* I-6

Tsalik, E.L., Jaggers, L.B., Glickman, S.W., Langley, R.J., Van Velkinburgh, J.C., Park, L.P., Fowler, V.G., Cairns, C.B., Kingsmore, S.F. and Woods, C.W., 2012. Discriminative value of inflammatory biomarkers for suspected sepsis. *The Journal of emergency medicine*, 43(1), pp.97-106

Widmaier, E. P., Hershel, R., & Strang, K. T. 2016. *Vander's Human Physiology: The Mechanisms of Body Function*(14th ed.). New York, NY: McGraw-Hill Education.



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Zoremba, Bickenbach, Krauss, Rossaint, Kuhlen, Schälte. 2007. Comparison of electrical velocimetry and thermodilution techniques for the measurement of cardiac. *Acta Anaesthesiol Scandinavia*.