

## DAFTAR PUSTAKA

- Allison, S.P., Lobo, D.N., dan Stanga, Z., 2001. The treatment of hypoalbuminaemia. *Clinical Nutrition (Edinburgh, Scotland)*, **20**: 275–279.
- Anderson, G.D., 2010. Developmental Pharmacokinetics. *Seminars in Pediatric Neurology*, , Pediatric Neuropharmacotherapeutics **17**: 208–213.
- Angeloni, S., Leboffe, C., Parente, A., Venditti, M., Giordano, A., Merli, M., dkk., 2008. Efficacy of current guidelines for the treatment of spontaneous bacterial peritonitis in the clinical practice. *World Journal of Gastroenterology*, **14**: 2757–2762.
- Anonim, 2002a. Promoting rational use of medicines: core components. *World Health Organization*, 1–6.
- Anonim, 2002b. *Clinical Practice Guidelines for Chronic Kidney Disease: Evaluation, Classification and Stratification*. National Kidney Foundation, New York.
- Anonim, 2003. *Pedoman penggunaan albumin*, II. ed. RSUD Dr. Soetomo, Surabaya.
- Anonim, 2013. *Pokok-Pokok Hasil Riskesdas Provinsi Riau*. Kementerian Kesehatan RI.
- Anonim, 2016. *Formularium Nasional 2016*.
- Aprianto, 2018. 'Hubungan Rasionalitas Pemberian Infus Albumin Dengan Luaran Klinis Pada Pasien Gangguan Ginjal Di Rawat Inap RSUD DR. Sardjito Yogyakarta', . Universitas Gajah Mada, Yogyakarta.
- Arafuri, N., Widjajanto, P.H., dan Haksari, E.L., 2016. Risk factors for the failure to achieve normal albumin serum levels after albumin transfusion in neonates. *Paediatrica Indonesiana*, **56**: 129–33.
- Arroyo, V., Fernandez, J., dan Ginès, P., 2008. Pathogenesis and treatment of hepatorenal syndrome. *Seminars in Liver Disease*, **28**: 81–95.
- Ballmer, P.E., 2001. Causes and mechanisms of hypoalbuminaemia. *Clinical Nutrition*, **20**: 271–273.
- Bernardi, M., Ricci, C.S., dan Zaccherini, G., 2014. Role of Human Albumin in the Management of Complications of Liver Cirrhosis. *Journal of Clinical and Experimental Hepatology*, **4**: 302–311.
- Brammer, C., Douglas, K., Fox, J., dan Latif, A.-L., 2016. *Clinical Guidelines for Human Albumin Use*. National Services Scotland.

- Brinch, K., Møller, S., Bendtsen, F., Becker, U., dan Henriksen, J.H., 2003. Plasma volume expansion by albumin in cirrhosis. Relation to blood volume distribution, arterial compliance and severity of disease. *Journal of Hepatology*, **39**: 24–31.
- Bunt, J.E.H., Rietveld, T., Schierbeek, H., Wattimena, J.L.D., Zimmermann, L.J.I., dan van Goudoever, J.B., 2007. Albumin synthesis in preterm infants on the first day of life studied with [1-13C]leucine. *American Journal of Physiology. Gastrointestinal and Liver Physiology*, **292**: G1157-1161.
- Caraceni, P., Tufoni, M., dan Bonavita, M.E., 2013. Clinical use of albumin. *Blood Transfusion*, **11**: s18–s25.
- Chen, T.-A., Tsao, Y.-C., Chen, A., Lo, G.-H., Lin, C.-K., Yu, H.-C., dkk., 2009. Effect of intravenous albumin on endotoxin removal, cytokines, and nitric oxide production in patients with cirrhosis and spontaneous bacterial peritonitis. *Scandinavian Journal of Gastroenterology*, **44**: 619–625.
- China, L., Skene, S.S., Shabir, Z., Maini, A., Sylvestre, Y., Bennett, K., dkk., 2017. Administration of Albumin Solution Increases Serum Levels of Albumin in Patients With Chronic Liver Failure in a Single-Arm Feasibility Trial. *Clinical Gastroenterology and Hepatology: The Official Clinical Practice Journal of the American Gastroenterological Association*, .
- Corrao, G., Aricò, S., Zambon, A., Torchio, P., dan Di Orio, F., 1997. Female sex and the risk of liver cirrhosis. Collaborative Groups for the Study of Liver Diseases in Italy. *Scandinavian Journal of Gastroenterology*, **32**: 1174–1180.
- de Castro, L.L., de Carvalho e Martins, M. do C., Garcez, A.M., Pacheco, J.F.R., Cunha, F.V.M., Moita Neto, J.M., dkk., 2014. Hypoalbuminemia and oxidative stress in patients on renal hemodialysis program. *Nutricion Hospitalaria*, **30**: 952–959.
- Doweiko, J.P. dan Nompleggi, D.J., 1991. The role of albumin in human physiology and pathophysiology, Part III: Albumin and disease states. *JPEN. Journal of parenteral and enteral nutrition*, **15**: 476–483.
- Emerson, T.E., 1989. Unique features of albumin: a brief review. *Critical Care Medicine*, **17**: 690–694.
- European Association for the Study of the Liver, 2010. EASL clinical practice guidelines on the management of ascites, spontaneous bacterial peritonitis, and hepatorenal syndrome in cirrhosis. *Journal of Hepatology*, **53**: 397–417.

- Evans, T.W., 2002. Review article: albumin as a drug—biological effects of albumin unrelated to oncotic pressure. *Alimentary Pharmacology & Therapeutics*, **16**: 6–11.
- Facciorusso, A., Nacchiero, M.C., Rosania, R., Laonigro, G., Longo, N., Panella, C., dkk., 2011. The use of human albumin for the treatment of ascites in patients with liver cirrhosis: item of safety, facts, controversies and perspectives. *Current Drug Safety*, **6**: 267–274.
- Fanali, G., di Masi, A., Trezza, V., Marino, M., Fasano, M., dan Ascenzi, P., 2012. Human serum albumin: from bench to bedside. *Molecular Aspects of Medicine*, **33**: 209–290.
- Fernández, J., Navasa, M., Garcia-Pagan, J.C., G-Abraldes, J., Jiménez, W., Bosch, J., dkk., 2004. Effect of intravenous albumin on systemic and hepatic hemodynamics and vasoactive neurohormonal systems in patients with cirrhosis and spontaneous bacterial peritonitis. *Journal of Hepatology*, **41**: 384–390.
- Fleck, A., Raines, G., Hawker, F., Trotter, J., Wallace, P.I., Ledingham, I.M., dkk., 1985. Increased vascular permeability: a major cause of hypoalbuminaemia in disease and injury. *Lancet (London, England)*, **1**: 781–784.
- Gahart, B.L. dan Nazareno, A.R., 2013. 2014 Intravenous Medications: A Handbook for Nurses and Health Professionals, dalam: *2014 Intravenous Medications: A Handbook for Nurses and Health Professionals*. Elsevier Health Sciences, hal. 29–31.
- Garioud, A., Cadranel, J.-F., Pauwels, A., Nouisbaum, J.-B., Thévenot, T., Dao, T., dkk., 2017. Albumin Use in Patients With Cirrhosis in France: Results of the “ALBU-LIVE” Survey: A Case for Better EASL Guidelines Diffusion and/or Revision. *Journal of Clinical Gastroenterology*, **51**: 831–838.
- Gatta, A., Verardo, A., dan Bolognesi, M., 2012. Hypoalbuminemia. *Internal and Emergency Medicine*, **7 Suppl 3**: S193-199.
- Gluud, L.L., Christensen, K., Christensen, E., dan Krag, A., 2010. Systematic review of randomized trials on vasoconstrictor drugs for hepatorenal syndrome. *Hepatology (Baltimore, Md.)*, **51**: 576–584.
- Grant, D.C. dan Forrester, S.D., 2001. Glomerulonephritis in Dogs and Cats: Glomerular Function, Pathophysiology, and Clinical Signs. *Compendium on Continuing Education for the Practicing Veterinarian*, **23**: 739–746.
- Guevara, M., Ginès, P., Fernández-Esparrach, G., Sort, P., Salmerón, J.M., Jiménez, W., dkk., 1998. Reversibility of hepatorenal syndrome by

prolonged administration of ornipressin and plasma volume expansion. *Hepatology (Baltimore, Md.)*, **27**: 35–41.

Guy, J. dan Peters, M.G., 2013. Liver Disease in Women: The Influence of Gender on Epidemiology, Natural History, and Patient Outcomes. *Gastroenterology & Hepatology*, **9**: 633–639.

Hasan, I. dan Indra, T.A., 2008. Peran Albumin dalam Penatalaksanaan Sirosis Hati. *Medicinus: Scientific Journal of Pharmaceutical Development and Medical Application*, **21**: 2–6.

Haskell, A., Nadel, E.R., Stachenfeld, N.S., Nagashima, K., dan Mack, G.W., 1997. Transcapillary escape rate of albumin in humans during exercise-induced hypervolemia. *Journal of Applied Physiology (Bethesda, Md.: 1985)*, **83**: 407–413.

Henriksen, J.H., Siemssen, O., Krintel, J.J., Malchow-Møller, A., Bendtsen, F., dan Ring-Larsen, H., 2001. Dynamics of albumin in plasma and ascitic fluid in patients with cirrhosis. *Journal of Hepatology*, **34**: 53–60.

Hwang, T.-L., 2009. Potential use of albumin administration in severe sepsis. *Journal of the Chinese Medical Association: JCMA*, **72**: 225–226.

Jahangard-Rafsanjani, Z., Javadi, M.R., Torkamandi, H., Alahyari, S., Hajhossein Talasaz, A., dan Gholami, K., 2011a. The Evaluation of Albumin Utilization in a Teaching University Hospital in Iran. *Iranian Journal of Pharmaceutical Research : IJPR*, **10**: 385–390.

Jardine, L.A., Jenkins-Marsh, S., dan Davies, M.W., 2004. Albumin infusion for low serum albumin in preterm newborn infants, dalam: *Cochrane Database of Systematic Reviews*. John Wiley & Sons, Ltd.

Jepsen, P., 2014. Comorbidity in cirrhosis. *World Journal of Gastroenterology : WJG*, **20**: 7223–7230.

Jepsen, P., Vilstrup, H., dan Lash, T.L., 2014. Development and validation of a comorbidity scoring system for patients with cirrhosis. *Gastroenterology*, **146**: 147–156; quiz e15-16.

Johnson, M., Parra, A., Garcia, R., Barthol, C., Laurel, Y., dan Shepherd, A., 2010. *Guidelines for Use of Albumin University Hospital Consortium*. Archives of Internal Medicine.

Kain, D., 2007. 'Why Liver Cancer Is More Prevalent in Males than in Females', . *University Of California*, .

Kaysen, G.A., Dubin, J.A., Müller, H.-G., Rosales, L., Levin, N.W., Mitch, W.E., dkk., 2004. Inflammation and reduced albumin synthesis associated with

stable decline in serum albumin in hemodialysis patients. *Kidney International*, **65**: 1408–1415.

Kim, H., Kisseleva, T., dan Brenner, D.A., 2015. Aging and liver disease. *Current opinion in gastroenterology*, **31**: 184–191.

Kim, S., McClave, S.A., Martindale, R.G., Miller, K.R., dan Hurt, R.T., 2017. Hypoalbuminemia and Clinical Outcomes: What is the Mechanism behind the Relationship? *The American Surgeon*, **83**: 1220–1227.

Kimball, S.R., Horetsky, R.L., dan Jefferson, L.S., 1995. Hormonal regulation of albumin gene expression in primary cultures of rat hepatocytes. *The American Journal of Physiology*, **268**: E6-14.

Lexicomp, 2013. *Drug Information Handbook: A Comprehensive Resource for All Clinicians and Healthcare Professionals*, Drug Information Handbook. Lexi-Comp.

Li, Q., Xing, H., Liu, D., dan Li, H., 2015. Negative impact of low body mass index on liver cirrhosis patients with hepatocellular carcinoma. *World Journal of Surgical Oncology*, **13**: .

Liu, B., Balkwill, A., Reeves, G., dan Beral, V., 2010. Body mass index and risk of liver cirrhosis in middle aged UK women: prospective study. *The BMJ*, **340**: .

Liumbruno, G., Bennardello, F., Lattanzio, A., Piccoli, P., dan Rossettias, G., 2009a. Recommendations for the use of albumin and immunoglobulins. *Blood Transfusion*, **7**: 216–234.

Made, I., Dewi, I., dan Wibawa, N., 2008. Korelasi Antara Derajat Penyakit Sirosis Hati Berdasarkan Klasifikasi Jurnal Penyakit Dalam 23–25.

Margarson, M.P. dan Soni, N.C., 2004. Changes in serum albumin concentration and volume expanding effects following a bolus of albumin 20% in septic patients. *British Journal of Anaesthesia*, **92**: 821–826.

Matos, G.C. de, Rozenfeld, S., dan Martins, M., 2010. Human albumin use at hospitals in the Metropolitan Region of Rio de Janeiro, Brazil. *Cadernos De Saude Publica*, **26**: 981–990.

Mazzaferro, E., Rudloff, E., dan Kirby, R., 2002. Role of albumin in the veterinary critically ill patient. *Journal of Veterinary Emergency and Critical Care*, **12**: 113–124.

Mc Clelland, D., 2007. *Handbook of Transfusion Medicine*, 5th ed. TSO.

- McEvoy, G.K., Snow, E.K., Kester, L., Miller, J., Welsh, O.H., Litvak, K., dkk., 2007. *AHFS Drug Information 2007*. American Society of Health-System Pharmacists.
- Møller, S., Henriksen, J.H., dan Bendtsen, F., 2008. Pathogenetic background for treatment of ascites and hepatorenal syndrome. *Hepatology International*, **2**: 416–428.
- Moore, K.P. dan Aithal, G.P., 2006. Guidelines on the management of ascites in cirrhosis. *Gut*, **55 Suppl 6**: vi1-12.
- Murray, R.K., Granner, D.K., dan Rodwell, V.W., 2006. *Harper's Illustrated Biochemistry*, 27th Edition. ed. The McGraw-Hill Companies.
- Nicholson, J.P., Wolmarans, M.R., dan Park, G.R., 2000. The role of albumin in critical illness. *British Journal of Anaesthesia*, **85**: 599–610.
- Oetl, K. dan Stauber, R.E., 2007. Physiological and pathological changes in the redox state of human serum albumin critically influence its binding properties. *British Journal of Pharmacology*, **151**: 580–590.
- Offringa, M., 1998. Excess mortality after human albumin administration in critically ill patients. Clinical and pathophysiological evidence suggests albumin is harmful. *BMJ (Clinical research ed.)*, **317**: 223–224.
- Palmese, S., Ughi, L., Iacono, F., Scibelli, G., De Robertis, E., Natale, A., dkk., 2005. Exogenous albumin administration to hypoalbuminemic patients in the ICU setting: A retrospective analysis. *Rivista Italiana di Nutrizione Parenterale ed Enterale*, **23**: .
- Patasik, Y.Z., Waleleng, B.J., dan Wantania, F., 2015. Profil Pasien Sirosis Hati Yang Dirawat Inap di RSUP Prof. Dr. R. D. Kandou Manado periode agustus 2012 – agustus 2014. *e-CliniC*, **3**: .
- Porto, B.S.S., Jorge, S.M., dan de Assis, M.G.E., 2005. [Exogenous human albumin supplementation in total parenteral nutrition of critically ill newborns]. *Jornal De Pediatria*, **81**: 41–46.
- Quinlan, G.J., Margaron, M.P., Mumby, S., Evans, T.W., dan Gutteridge, J.M., 1998. Administration of albumin to patients with sepsis syndrome: a possible beneficial role in plasma thiol repletion. *Clinical Science (London, England: 1979)*, **95**: 459–465.
- Quinlan, G.J., Martin, G.S., dan Evans, T.W., 2005a. Albumin: biochemical properties and therapeutic potential. *Hepatology (Baltimore, Md.)*, **41**: 1211–1219.



- Quinlan, G.J., Martin, G.S., dan Evans, T.W., 2005b. Albumin: biochemical properties and therapeutic potential. *Hepatology (Baltimore, Md.)*, **41**: 1211–1219.
- Roberts, I., 1998. Human albumin administration in critically ill patients: systematic review of randomised controlled trials. *BMJ : British Medical Journal*, **317**: 235–240.
- Rothschild, M.A., Oratz, M., dan Schreiber, S.S., 1973. Albumin Metabolism. *Gastroenterology*, **64**: 324–337.
- Rothschild, M.A., Oratz, M., dan Schreiber, S.S., 1988. Serum albumin. *Hepatology (Baltimore, Md.)*, **8**: 385–401.
- Runyon, B.A. dan AASLD, 2013. Introduction to the revised American Association for the Study of Liver Diseases Practice Guideline management of adult patients with ascites due to cirrhosis 2012. *Hepatology (Baltimore, Md.)*, **57**: 1651–1653.
- Salerno, F., Gerbes, A., Ginès, P., Wong, F., dan Arroyo, V., 2007. Diagnosis, prevention and treatment of hepatorenal syndrome in cirrhosis. *Gut*, **56**: 1310–1318.
- Sanabria, P. dan Vargas, F.F., 1988. Effect of albumin on the width of water channels in venous endothelium. *The American Journal of Physiology*, **255**: H638–645.
- Shalish, W., Olivier, F., Aly, H., dan Sant’Anna, G., 2017. Uses and misuses of albumin during resuscitation and in the neonatal intensive care unit. *Seminars in Fetal & Neonatal Medicine*, **22**: 328–335.
- Shateri, K., Mohammadi, A., Moloudi, F., Nosair, E., dan Ghasemi-rad, M., 2012. Correlation Between Sonographic Portal Vein Diameter and Flow Velocity With the Clinical Scoring Systems MELD and CTP in Cirrhotic Patients: Is There a Relationship? *Gastroenterology Research*, **5**: 112–119.
- Silbernagl, S. dan Lang, F., 2000. *Fibrosis and Cirrhosis of The Liver. In Color Atlas of Pathophysiology*, 2nd ed. New York.
- Siswandono dan Soekardjo, B., 1995. *Kimia Medisinal*, 2nd ed. Airlangga University Press, Surabaya.
- Sort, P., Navasa, M., Arroyo, V., Aldeguer, X., Planas, R., Ruiz-del-Arbol, L., dkk., 1999. Effect of intravenous albumin on renal impairment and mortality in patients with cirrhosis and spontaneous bacterial peritonitis. *The New England Journal of Medicine*, **341**: 403–409.

- Terawaki, H., Yoshimura, K., Hasegawa, T., Matsuyama, Y., Negawa, T., Yamada, K., dkk., 2004. Oxidative stress is enhanced in correlation with renal dysfunction: examination with the redox state of albumin. *Kidney International*, **66**: 1988–1993.
- Titó, L., Rimola, A., Ginès, P., Llach, J., Arroyo, V., dan Rodés, J., 1988. Recurrence of spontaneous bacterial peritonitis in cirrhosis: frequency and predictive factors. *Hepatology (Baltimore, Md.)*, **8**: 27–31.
- Uhing, M.R., 2004. The albumin controversy. *Clinics in Perinatology*, **31**: 475–488.
- Vincent, Jean-Louis, Dubois, M.-J., Navickis, R.J., dan Wilkes, M.M., 2003a. Hypoalbuminemia in acute illness: is there a rationale for intervention? A meta-analysis of cohort studies and controlled trials. *Annals of Surgery*, **237**: 319–334.
- Vincent, J.-L., Navickis, R.J., dan Wilkes, M.M., 2004. Morbidity in hospitalized patients receiving human albumin: a meta-analysis of randomized, controlled trials. *Critical Care Medicine*, **32**: 2029–2038.
- Vincent, J.-L., Sakr, Y., Reinhart, K., Sprung, C.L., Gerlach, H., dan Ranieri, V.M., 2005. Is albumin administration in the acutely ill associated with increased mortality? Results of the SOAP study. *Critical Care*, **9**: R745–R754.
- Vincent, J.-L., Wilkes, M.M., dan Navickis, R.J., 2003. Safety of human albumin—serious adverse events reported worldwide in 1998–2000†. *British Journal of Anaesthesia*, **91**: 625–630.
- Walayat, S., Martin, D., Patel, J., Ahmed, U., N Asghar, M., Pai, A.U., dkk., 2017. Role of albumin in cirrhosis: from a hospitalist's perspective. *Journal of Community Hospital Internal Medicine Perspectives*, **7**: 8–14.
- Wilkie, M., Finch, S., dan Schembri, S., 2015. Inhaled Corticosteroids for Chronic Obstructive Pulmonary Disease—The Shifting Treatment Paradigm. *COPD*, **12**: 582–590.
- Yen, Y.-H., Chang, K.-C., Tsai, M.-C., Tseng, P.-L., Lin, M.-T., Wu, C.-K., dkk., 2018. Elevated body mass index is a risk factor associated with possible liver cirrhosis across different etiologies of chronic liver disease. *Journal of the Formosan Medical Association*, **117**: 268–275.
- Zhang, L., Yin, J., Duan, Y., Yang, Y., Yuan, L., dan Cao, T., 2011. Assessment of intrahepatic blood flow by Doppler ultrasonography: relationship between the hepatic vein, portal vein, hepatic artery and portal pressure measured intraoperatively in patients with portal hypertension. *BMC gastroenterology*, **11**: 84.



Zhou, T., Lu, S., Liu, X., Zhang, Y., dan Xu, F., 2013. Review of the rational use and adverse reactions to human serum albumin in the People's Republic of China. *Patient preference and adherence*, **7**: 1207–1212.

Zoellner, H., Höfler, M., Beckmann, R., Hufnagl, P., Vanyek, E., Bielek, E., dkk., 1996. Serum albumin is a specific inhibitor of apoptosis in human endothelial cells. *Journal of Cell Science*, **109 ( Pt 10)**: 2571–2580.