

DAFTAR PUSTAKA

- Aguirre, U., 2015. Discriminant indices for distinguishing thalassemia and iron deficiency in patients with microcytic anemia : a meta-analysis 53, 1883–1894.
- Andriastuti, M., Ilmana, G., Nawangwulan, S.A., Kosasih, K.A., 2020. Prevalence of anemia and iron profile among children and adolescent with low socio-economic status. *Int. J. Pediatr. Adolesc. Med.* 7, 88–92.
- Aster, J.C., Bunn, H.F., 2017. Pathophysiology of Blood Disorders, Second. ed. McGraw-Hill Education.
- Ayan, D., Soylemez, S., 2020. Measuring plasma ferritin levels with two different methods: A comparison of roche cobas E601 versus roche cobas C501 (integrated modular system roche cobas 6000). *J. Med. Biochem.* 39, 13–18.
- Aydogan, G., Keskin, S., Akici, F., Salcioglu, Z., Bayram, C., Uysalol, E.P., Gucer, T.N.T., Ersoy, G., Ozdemir, N., 2019. Causes of Hypochromic Microcytic Anemia in Children and Evaluation of Laboratory Parameters in the Differentiation. *J. Pediatr. Hematol. Oncol.* 41, e221–e223.
- Brancaleoni, V., Di Pierro, E., Motta, I., Cappellini, M.D., 2016. Laboratory diagnosis of thalassemia. *Int. J. Lab. Hematol.* 38, 32–40.
- Bunn, H.F., Sankaran, V.G., 2017. Thalassemia. In: Aster, J.C., Bunn, H.F. (Eds.), Pathophysiology of Blood Disorders. McGraw-Hill Education.
- Carlos, A.M., Souza, B.M.B. de, Souza, R.A.V. de, Resende, G.A.D., Pereira, G. de A., Moraes-Souza, H., 2018. Causes of microcytic anaemia and evaluation of conventional laboratory parameters in the differentiation of erythrocytic microcytosis in blood donors candidates*. *Hematology* 23, 705–711.
- CDC, 2015. Hemoglobinopathies : Current Practices for Screening , Confirmation and Follow-up. *Assoc. Public Heal. Lab.* 5–57.
- Dati, F., Johnson, A.M., Whicher, J.T., 2001. The existing interim consensus reference ranges and the future approach. *Clin. Chem. Lab. Med.* 39, 1134–1136.
- Doig, K., 2020. Disorders of Iron Kinetics and Heme Metabolism. In: Keohane, E.M., Otto, C.N., Walenga, J.M. (Eds.), Rodak's Hematology Clinical Principles and Applications. Elsevier Inc, New York, NY, pp. 264–278.
- Düzenli Kar, Y., Özdemir, Z.C., Emir, B., Bör, Ö., 2020. Erythrocyte Indices as Differential Diagnostic Biomarkers of Iron Deficiency Anemia and Thalassemia. *J. Pediatr. Hematol. Oncol.* 42, 208–213.
- Elsayed, M.E., Sharif, M.U., Stack, A.G., 2016. Transferrin Saturation. In: Advances in Clinical Chemistry. Elsevier Inc., pp. 71–97.
- Fletcher, A., Forbes, A., Svenson, N., Wayne Thomas, D., 2021. Guideline for the laboratory diagnosis of iron deficiency in adults (excluding pregnancy) and children. *Br. J. Haematol.* 196, 523–529.
- Fucharoen, S., Weatherall, D.J., 2012. The Hemoglobin E Thalassemias. *Cold Spring Harb. Perspect. Med.* 2, a011734–a011734.
- Fucharoen, S., Winichagoon, P., 2011. Haemoglobinopathies in southeast Asia. *Indian J. Med. Res.* 134, 498–506.

- Goh, L.P.W., Chong, E.T.J., Lee, P.C., 2020. Prevalence of alpha(α)-thalassemia in Southeast Asia (2010–2020): A meta-analysis involving 83,674 subjects. *Int. J. Environ. Res. Public Health* 17, 1–11.
- Gulen, H., Hanimeli, O., Karaca, O., Taneli, F., 2012. α -Thalassemia Frequency and Mutations in Children with Hypochromic Microcytic Anemias and Relation with β -Thalassemia, Iron Deficiency Anemia. *Pediatr. Hematol. Oncol.* 29, 241–246.
- Harris, N., Kunicka, J., Kratz, A., 2005. The ADVIA 2120 Hematology System: Flow Cytometry-Based Analysis of Blood and Body Fluids in the Routine Hematology Laboratory. *Lab. Hematol.* 11, 47–61.
- Hoffbrand, A.V., Moss, P.A.H., 2016. Hoffbrand's Essential Haematology, 7th ed. John Wiley & Sons Ltd, West Sussex, England.
- Hoffmann, J.J.M.L., Urrechaga, E., Aguirre, U., 2015. Discriminant indices for distinguishing thalassemia and iron deficiency in patients with microcytic anemia: A meta-analysis. *Clin. Chem. Lab. Med.* 53, 1883–1894.
- Huang, T.C., Wu, Y.Y., Chen, Y.G., Lai, S.W., Wu, S.C., Ye, R.H., Lu, C.S., Chen, J.H., 2015. Discrimination index of microcytic anemia in young soldiers: A single institutional analysis. *PLoS One* 10, 1–10.
- Husna, N., Arif, A. Al, Putri, C., Leonard, E., Handayani, N.S.N., 2017. Prevalence and Distribution of Thalassemia Trait Screening. *J. Med. Sci. (Berkala Ilmu Kedokteran)* 49, 106–113.
- Kementrian Kesehatan RI, 2018. Keputusan Menteri Kesehatan Republik Indonesia Nomor HK.01.07/Menkes/1/2018 tentang Pedoman Nasional Pelayanan Kedokteran Tata Laksana Thalassemia 1–90.
- Kishore, B., Khare, P., Gupta, R.J., Bisht, S., Majumdar, K., 2007. Hemoglobin E disease in North Indian population: A report of 11 cases. *Hematology* 12, 343–347.
- Kjeldsberg, C.R., Bahler, D.W., Blaylock, R.C., Elenitoba-Johnson, K.S.J., Foucar, K., Lim, M.S., McKenna, R.W., O'Malley, D.P., Perkins, S.L., Peterson, L.C., Rodgers, G.M., Vardiman, J., 2006. Practical Diagnosis of Hematologic Disorders, Fourth Edition, 4th ed. ASCP Press, Chicago, IL.
- Kohne, E., 2011. Hemoglobinopathies : Clinical Manifestations, Diagnosis, and Treatment. *Dtsch. Arztebl.* 108, 532–540.
- Kumar, A., Saha, D., Kini, J., Murali, N., Chakraborti, S., Adiga, D., 2017. The role of discriminant functions in screening beta thalassemia trait and iron deficiency anemia among laboratory samples. *J. Lab. Physicians* 9, 195–201.
- Kundrapu, S., Noguez, J., 2018. Laboratory Assessment of Anemia. In: *Advances in Clinical Chemistry*. Elsevier Inc., pp. 197–225.
- Lithanatudom, P., Wipasa, J., Inti, P., Chawansuntati, K., Svasti, S., Fucharoen, S., Kangwanpong, D., Kampuansai, J., 2016. Hemoglobin e prevalence among ethnic groups residing in malaria-endemic areas of Northern Thailand and its lack of association with plasmodium falciparum invasion in vitro. *PLoS One* 11, 1–10.
- Long, X., Fang, J., Yao, L., Xiao, Q., Pan, T., 2014. Correlation Analysis between Mean Corpuscular Hemoglobin and Mean Corpuscular Volume for Thalassemia Screening in Large Population. *Am. J. Anal. Chem.* 05, 901–

907.

- Matos, J.F., Borges, K.B.G., Fernandes, A.P.S.M., Faria, J.R., Carvalho, M.D.G., 2015. RDW as differential parameter between microcytic anemias in “pure” and concomitant forms. *J. Bras. Patol. e Med. Lab.* 51, 22–27.
- Matos, J.F., Dusse, L.M.S., Borges, K.B.G., de Castro, R.L.V., Coura-Vital, W., Carvalho, M. das G., 2016. A new index to discriminate between iron deficiency anemia and thalassemia trait. *Rev. Bras. Hematol. Hemoter.* 38, 214–219.
- McKinnon, K.M., 2018. Flow Cytometry: An Overview. *Curr. Protoc. Immunol.* 120, 56–61.
- Mettananda, S., Paranamana, S., Fernando, R., Suranjan, M., Rodrigo, R., Perera, L., Vipulaguna, T., Fernando, P., Fernando, M., Dayanath, B.K.T.P., Costa, Y., Premawardhena, A., 2020. Microcytic anemia in children: parallel screening for iron deficiency and thalassemia provides a useful opportunity for thalassemia prevention in low- and middle-income countries. *Pediatr. Hematol. Oncol.* 37, 326–336.
- Olivieri, N.F., Pakbaz, Z., Vichinsky, E., 2010. HbE/ β -thalassemia: Basis of marked clinical diversity. *Hematol. Oncol. Clin. North Am.* 24, 1055–1070.
- Pereira, I., George, T.I., Arber, D.A., 2012. Atlas of Peripheral Blood: the Primary Diagnostic Tool. Wolters Kluwer Health, Philadelphia.
- Pincus, Matthew R., Bock, J.L., Rossi, R., Cai, D., 2017. Chemical Basis for Analyte Assays and Common Interferences. In: McPherson, R.A., Pincus, M.R. (Eds.), *Henry’s Clinical Diagnosis and Management by Laboratory Methods*. Elsevier, St. Louis, Missouri, pp. 428–440.
- Polprasert, C., Wongprachar, P., Suksusut, A., Settapiboon, R., Amornsirivat, S., Sophonphan, J., Uaprasert, N., Sucharitchan, P., Rojnuckarin, P., 2020. Comprehensive screening for coexisting heterozygous α^0 -thalassemia in hemoglobin E trait. *Hematology* 25, 276–279.
- Ribeil, J.-A., Arlet, J.-B., Dussiot, M., Cruz Moura, I., Courtois, G., Hermine, O., 2013. Ineffective Erythropoiesis in β -Thalassemia. *Sci. World J.* 2013, 1–11.
- Siemens Healthcare Diagnostics, 2019. ADVIA® 2120i Hematology System Technical Specifications.
- Souza, R.A.V. de, Carlos, A.M., Souza, B.M.B. de, Rodrigues, C.V., Pereira, G. de A., Moraes-Souza, H., 2015. α -Thalassemia: Genotypic Profile Associated with Ethnicity and Hematological Differentiation of Iron Deficiency Anemia in the Region of Uberaba, Minas Gerais, Brazil. *Hemoglobin* 39, 264–269.
- Sproston, N.R., Ashworth, J.J., 2018. Role of C-Reactive Protein at Sites of Inflammation and Infection. *Front. Immunol.* 9, 1–11.
- Subhashree, A.R., Parameaswari, P.J., Shanthi, B., Carnagarin, R., Parijatham, B.O., 2012. The reference intervals for the haematological parameters in healthy adult population of Chennai, Southern India. *J. Clin. Diagnostic Res.* 6, 1675–1680.
- Surjawan, Y., Tan, H.L., Setiabudy, R.D., Rositawati, W., 2017. Early screening of hemoglobinopathy in Indonesia using erythrocyte indices. *Indones. Biomed. J.* 9, 99–105.

- Urrechaga, E., 2009. Red blood cell microcytosis and hypochromia in the differential diagnosis of iron deficiency and β -thalassaemia trait. *Int. J. Lab. Hematol.* 31, 528–534.
- Urrechaga, E., Borque, L., Escanero, J.F., 2011a. The role of automated measurement of RBC subpopulations in differential diagnosis of microcytic anemia and β -thalassemia screening. *Am. J. Clin. Pathol.* 135, 374–379.
- Urrechaga, E., Borque, L., Escanero, J.F., 2011b. Erythrocyte and reticulocyte parameters in iron deficiency and thalassemia. *J. Clin. Lab. Anal.* 25, 223–228.
- Urrechaga, E., Hoffmann, J.J.M.L., Izquierdo, S., Escanero, J.F., 2015. Differential diagnosis of microcytic anemia: the role of microcytic and hypochromic erythrocytes. *Int. J. Lab. Hematol.* 37, 334–340.
- Vajpayee, N., Graham, S.S., Bem, S., 2017. Basic Examination of Blood and Bone Marrow. In: McPherson, R.A., Pincus, M.R. (Eds.), *Henry's Clinical Diagnosis and Management by Laboratory Methods*. Elsevier, St. Louis, Missouri, pp. 510–539.
- Vichinsky, E., 2007. Hemoglobin e syndromes. *Hematology Am. Soc. Hematol. Educ. Program* 79–83.
- Viprakasit, V., Quah, C.L., Chong, T., 2009. Iron chelation therapy in the management of thalassemia : the Asian perspectives 435–445.
- Vis, J.Y., Huisman, A., 2016. Verification and quality control of routine hematology analyzers. *Int. J. Lab. Hematol.* 38, 100–109.
- Wahed, A., Quesada, A., Dasgupta, A., 2020. Hemoglobinopathies and thalassemias. In: *Hematology and Coagulation*. Elsevier, pp. 51–75.
- Waye, J.S., Eng, B., 2013. Diagnostic testing for α -globin gene disorders in a heterogeneous North American population. *Int. J. Lab. Hematol.* 35, 306–313.
- Weatherall, D.J., 2018. The Evolving Spectrum of the Epidemiology of Thalassemia 32, 165–175.
- Wee, S.Y., Muhamed Said, S.S., Raja Sabudin, R.Z.A., Alauddin, H., Ithnin, A., 2020. Microcytic to hypochromic ratio as a discriminant index of thalassaemia trait in subjects with hypochromic anaemia. *Malays. J. Pathol.* 42, 195–201.
- Whittaker, P., 2016. Iron Deficiency and Its Prevention, Second Edi. ed, *International Encyclopedia of Public Health*. Elsevier.
- Winichagoon, P., Kumbunlue, R., Sirankapracha, P., Boonmongkol, P., Fucharoen, S., 2015a. Discrimination of various thalassemia syndromes and iron deficiency and utilization of reticulocyte measurements in monitoring response to iron therapy. *Blood Cells, Mol. Dis.* 54, 336–341.
- Winichagoon, P., Kumpan, P., Holmes, P., Finlayson, J., Newbound, C., Kabral, A., Li, B., Nuinoon, M., Fawcett, T., Tayapiwatana, C., Kasinrer, W., Fucharoen, S., 2015b. Validation of the immunochromatographic strip for α -thalassemia screening: A multicenter study. *Transl. Res.* 165, 689–695.
- Zhou, Y., Zhang, J., Wang, C., Zhou, Lihua, Zhou, Lu, Ou, D., Peng, D., 2020. Application of HbA2 levels and red cell indices-based new model in the differentiation of thalassemia traits from iron deficiency in hypochromic

microcytic anemia Cases. *Int. J. Lab. Hematol.* 42, 526–532.

Zivot, A., Lipton, J.M., Narla, A., Blanc, L., 2018. Erythropoiesis: insights into pathophysiology and treatments in 2017. *Mol. Med.* 24, 11.