

DAFTAR PUSTAKA

1. Liansyah T, Herdata H. Aspek Klinis dan Tatalaksana Thalasemia pada Anak. *J Kedokt N Med*. 2018;1(1):63-39.
2. Purba R, Nancy Y, Farida H. Faktor-Faktor yang Mempengaruhi Pertumbuhan Anak Penderita Thalasemia Mayor di Jawa Tengah, Indonesia. *J Kedokt Diponegoro*. 2019;8(4):1236-1247.
3. Larasati S, M R. Pengaruh Transfusi Sel Darah Merah Terhadap Perubahan Kadar Kalium pada Pasien Thalassemia Mayor. *J Sari Pediatr*. 2019;21(4):2-3.
4. Delaporta P, Kattamis A, Apostolakou F, et al. Correlation of NT-proBNP levels and cardiac iron concentration in patients with transfusion-dependent thalassemia major. *Blood Cells, Mol Dis*. 2013;50(1):20-24.
5. Ibrahim M, Azab A, Kamal N, et al. Early detection of myocardial dysfunction in poorly treated pediatric thalassemia children and adolescents: Two Saudi centers experience. *Ann Med Surg (Lond)*. 2016;9:6-11.
6. Rosdiana N, Nasir C. Peningkatan Kadar Ferritin Serum Memiliki Korelasi Negatif dengan Kadar High Density Lipoprotein pada Anak Penyandang Thalassemia Beta Mayor. *J Sari Pediatr*. 2019;21(1):2-3.
7. Kostopolou A, Tsiapras D, Chaidaroglou A, Giannis D, Farmakis D, Kremastinos D. The pathophysiological relationship and clinical significance of left atrial function and left ventricular diastolic dysfunction in β -thalassemia major. *Am J Hematol*. 2014;89(1):13-18.
8. Kautsar A, Advani N, Andriastut M. N-terminal-pro-b-type natriuretic peptide levels and cardiac hemosiderosis in adolescent β -thalassemia major patients. *Ann Pediatr Cardiol*. 2019;12:32-37.
9. Alassaf A, Michael A, Yesim A, et al. *2021 Guidelines For The Management Of Transfusion Dependent Thalassemia (TDT)*. (John P, Ali

- T, Domenica CM, Dimitrios F, eds.). Thalassaemia International Federation; 2021.
10. Lekawanvijit, S Chattipakorn N. Iron overload thalassemic cardiomyopathy: Iron status assessment and mechanisms of mechanical and electrical disturbance due to iron toxicity. *Can J Cardiol.* 2009;25.
 11. Salerno M, Sharif B, Arheden H, et al. Recent Advances in Cardiovascular Magnetic Resonance Techniques and Applications. *Circ Cardiovasc Imaging.* 2017;10(6).
 12. Kurtoğlu AU, Karakuş V, Kurtoglu E, Bozkurt S. NT-proBNP levels in β -thalassaemia major patients without cardiac hemosiderosis. *Turkish J Biochem.* 2016;42(1).
 13. Vlachou M, Kamperidis, V Giannakoulas G, Karamitsos T, Vlachaki E, Karvounis H. Biochemical and imaging markers in patients with thalassaemia. 2020;1–9. *Hell J Cardiol.* Published online 2020:1-9.
 14. Kremastinos DT, Hamodraka E, Parissis J, Tsiapras D, Dima K, Maisel A. Predictive value of B-type natriuretic peptides in detecting latent left ventricular diastolic dysfunction in β -thalassaemia major. *Am Heart J.* 2010;159(1):68-74.
 15. Goudarzipour K, Alizadeh P, Tavassol HH, Kazemi R, Eshghi P, Mojtahedzadeh S. A Comparison Between MRIT2 and NT-ProBNP in Early Detection of Heart Diseases in Thalassaemia Major Patients: A Cross-Sectional Study. *Indian J Hematol Blood Transfus.* 2017;33(4):541-544.
 16. Spinar J, Spinarova L, Malek F, et al. Prognostic value of NT-proBNP added to clinical parameters to predict two-year prognosis of chronic heart failure patients with mid-range and reduced ejection fraction – A report from FAR NHL prospective registry. *PLoS One.* 2019;14(3).
 17. Panagopoulou V, Deftereos S, Kossvakis C, et al. NTproBNP: an important biomarker in cardiac diseases. *Curr Top Med Chem.* 2013;13(2):82-94.
 18. Kiess A, Green J, Willenberg A, et al. Age-Dependent Reference Values

- for hs-Troponin T and NT-proBNP and Determining Factors in a Cohort of Healthy Children (The LIFE Child Study). *Pediatr Cardiol.* 2022;43:1071–1083.
19. Welsh P, Campbell RT, Mooney L, et al. Reference Ranges for NT-proBNP (N-Terminal Pro-B-Type Natriuretic Peptide) and Risk Factors for Higher NT-proBNP Concentrations in a Large General Population Cohort. *Circ Hear Fail.* 2022;10(15).
20. Kanazirev B, Dimova M, Kaleva V, S G, Petrova K, Zlateva V. Early identification of heart failure in patients with thalassemia major by NT-proBNP examination. Correlation with echocardiographic parameters of morphology and function. *Int J Med Heal Res.* 2017;2(1):15-27.
21. Hanifah M. *Gambaran Anak Talasemia Di Rumah Sakit Umum Daerah Dr. Soediran Mangun Sumarso Wonogiri.* Sekolah Tinggi Ilmu Kesehatan Aisyiah Surakarta; 2018.
22. Noori N, Teimouri A, Moghaddam M. Diagnostic value of NT-proBNP biomarker and echocardiographic in cardiac involvements in Beta-thalassemia patients. *Int J Pediatr.* 2017;5(11):6077–92.
23. Deraz S, Naby S, Mahmoud A. Assesment of Ventricular Dysfunction in Egyptian Children with Beta-Thalessemia Major. *Hematol Oncol Stem Cell Therr.* 2021;14(1):206-213.
24. Singh M, Kumar R, Tewari S, Agarwal. Determining NT-proBNP levels with diastolik dysfunction in thalassemia major patients. *J Pediatr Genet.* Published online 2017:1-5.
25. Safniyat S, Shakibazad N, Haghpanah S, Amoozegar H, Karimi M, Safaei S. Parameters of tissue iron overload and cardiac function in patients with thalassemia major and intermedia. *Acta Haematol Pol.* 2020;51(2):95-101.
26. Purwaningtyas R. *Hubungan Antara Kadar Feritin Dengan Gangguan Fungsi Jantung Diastolik Dan Sistolik Pada Penderita Talasemia Anak.* Universitas Sebelas Maret; 2010.
27. Suryani E, Wiharto, Wahyudiani, Novi K. Identifikasi Anemia Talasemia Betha Mayor Berdasarkan Morfologi Sel Darah Merah. *Sci J Informatics.*

2016;2(1):15-27.

28. Hutahaen F, Hendrianingtyas M. Hubungan Jumlah Transfusi dengan Kadar TSH pada Thalassemia. *Diponegoro Med J*. 2017;6(2):558-566.
29. Hasan R, Alatas H. *Buku Kuliah Ilmu Kesehatan Anak*. 1st ed. (Hasan R, Alatas H, eds.). Fakultas Kedokteran Indonesia; 2007.
30. Vitrano A, Musallam KM, Meloni A, et al. Development of a Thalassemia International Prognostic Scoring System (TIPSS). *Blood Cells, Mol Dis*. 2023;99(102710).
31. Bajwa H, Basit H. *Thalassemia*. StatPearls Publishing; 2020.
32. Taher A, Saliba A. Iron overload in thalassemia: different organs at different rates. *Hematology*. Published online 2017.
33. P2PTM Kemenkes R1. Hari Talasemia Sedunia 2019 : Putuskan Mata Rantai Talasemia Mayor. Kementerian Kesehatan Republik Indonesia.
34. Wahidiyat PA, Sari TT, Rahmartani LD, et al. An insight into Indonesian current thalassaemia care and challenges. *ISBT Sci Ser*. 2020;15(3):334-341.
35. Dauhan A. *Korelasi Antara Nilai Troponin (Troponin T Dan Troponin I) Dengan Skor PELOD-2 Pada Sepsis Anak Sebagai Faktor Prediktif Mortalitas*. Universitas Sumatera Utera.; 2018.
36. Gamella E, Recalcati S, Rybinska I, Buratti P, Cairo G. Iron-induced Damage in Cardiomyopathy: Oxidative-Dependent and Independent Mechanisms. *Oxidative Med Cell Longevity*. Published online 2015:1-10.
37. Fakultas Kedokteran UNS. Modul Kardiomiopati. Pediatrics.
38. Wood J. Cardiac Complications in Thalassemia Major. *Hemoglobin*. 33(1):81-86.
39. Sayehmiri K, Adfar G, Shohani M, Soleymani A, Azami M. Cardiac complications in patients with thalassemia major in Iran : a meta-analysis. *Prog Pediatr Cardiol*. Published online 2017:1-6.
40. Kremastinos D, Farmakis D, Aessopos A, Hahalis G, Hamodraka E, Tsiapras D. B-Thalassemia Cardiomyopathy: History, Present Considerations, and Future Perspectives. *Circ Hear Fail*. 2010;3:451-458.

41. Tahura S, Hussain M. Heart Failure in Children having Thalassemia Major. *Imp J Interdiscip Res.* 2017;3(4):1269–74.
42. Widyanto D, Priyatno A, Tamam M. Faktor yang Mempengaruhi Kadar NT-proBNP pada anak dengan PJP Pirau Kiri ke Kanan yang Mengalami Gagal Jantung. *Sari PEDIATR.* 2015;17(3):216 – 221.
43. Pan Y, Li D, Ma J, Shan L, Wei M. NT-proBNP test with improved accuracy for the diagnosis of chronic heart failure. *Med (United States).* 2017;96(51).
44. Wahidayat P, Permono B. *Hemoglobinopati Dan Talasemia: Buku Ajar Hemotologi Onkologi Anak.* Ikatan Dokter Anak Indonesia; 2018.
45. McDonagh T, Metra M, Adamo M, Gardner R, Baumhach A, Bohm M. *2021 ESC Guidelines for the Diagnosis and Treatment of Acute and Chronic Heart Failure: Developed by the Task Force for the Diagnosis and Treatment of Acute and Chronic Heart Failure Of.;* 2021.
46. Frans E, Rahman M, Ontoseno T. Correlation Between Serum Ferritin and Heart Function In Children with Major Thalessemia At Dr. Soetomo Hospital. *Indones J Clin Pathol Med Lab.* 2019;26(1):96–101.
47. Chumairoh S. Tindakan Percutaneous Coronary Intervention pada Penilaian Grade Disfungsi Diastolik dan Tekanan Pengisian Ventrikel Kiri pada Pasien Gagal Jantung. *J Arsip Kardiovask Indones.* 2018;31(1):1-9.
48. Subroto F, Advani N. Gangguan Fungsi Jantung pada Thalassemia Mayor. *Sari PEDIATR.* 2003;5(1):12-15.
49. Bioassay Technology Laboratory. Human Epidydimal protein 4 ELISA Kit. Published online 2020:1-8.
50. Wahidiyat PA, Fucharoen SSS, Setianingsih I, Putriasih SA. Applicability of a clinical scoring criteria for disease severity of β -thalassemia/hemoglobin E in Indonesia. *Med J Indones.* 2018;27:26-32.
51. Al-Ali ZAJR, Fara SH. Prevalence of β -thalassemia Patients in Missan Province. *Glob J Biol Agric Heal Sci.* 2018;5(1):68-70.
52. Wahyuni MS, Ali M, Rosdiana N, Lubis B. Quality of life assessment of children with thalassemia. *Paediatr Indones.* 2011;51(3):163-170.

53. Jameel T, Suliman MI, Rehman D. The Compromised Quality of Life in β -Thalassemia Major Children in NonUrban Setup in a Developing Country. *J Hematol Thromboembolic Dis.* 2016;4(3):1-5.
54. Elzaree FA, Shehata MA, Wakeel MA El, El-Alameey IR, AbuShady MM, Helal SI. Adaptive Functioning and Psychosocial Problems in Children with Beta Thalassemia Major. *Maced J Med Sci.* 2018;6(12):2337-2341.
55. Menteri Kesehatan Republik Indonesia. *Pedoman Nasional Pelayanan Kedokteran Tata Laksana Thalasemia.* Menteri Kesehatan Republik Indonesia; 2018.
56. Mishra AK, Tiwari A. Iron Overload in Beta Thalassaemia Major and Intermedia Patients. *Maedica (Bucur).* 2013;8(4):328–332.
57. Kaur AI, Chavan S, Agarkhedkar S, Upase D. Iron Toxicity Measurement by Serum Ferritin Levels Due to Blood Transfusion in Patients of Thalassemia Major. *Pediatr Educ Res.* 2020;8(1):25-29.
58. Aycicek A, Koc A, Bayram C, Abuhandan M. The Impact of Patient and Parents' Education by Nurses on Serum Ferritin Levels in Children with Beta-Thalassemia Major. *Glob J Hematol Blood Transfus.* 2018;3:48-53.
59. Fianza PI, Rahmawati A, Widihashta SH, et al. Iron Overload in Transfusion-Dependent Indonesian Thalassemic Patients. *Anemia.* Published online 2021:1-8.
60. Rachmilewitz EA, Giardina PJ. How I treat thalassemia. *Blood.* 2018;118(13):3479-3488. doi:10.1182/blood-2010-08-300335
61. Bains M, Mandal K. A Study to Assess the Quality of Life among Children with Thalassemia and its Relationship with Selected Factors in Selected Hospitals of Delhi. *Indian J Youth Adolesc Heal.* 2019;6(3):1-7.
62. Irdawati, Syaiful AA, Haryan A. Hubungan Usia Anak Penderita Thalasemia Dengan Frekuensi Transfusi. *J Ber Ilmu Keperawatan.* 2021;14(2):1-7.
63. Shah N, Anupa Mishra, Dhaval Chauhan CV, Shah NR. Study on effectiveness of transfusion program in thalassemia major patients receiving multiple blood transfusions at a transfusion centre in Western

- India. *Asian J Transf Sci.* 2010;4(2).
64. Kautsar A, Advani N, Andriastuti M. N-terminal-pro-b-type natriuretic peptide levels and cardiac hemosiderosis in adolescent β -thalassemia major patients. *Ann Pediatr Cardiol.* 2019;12(1):32-37.
65. Tissot C, Singh Y, Sekarski N. Echocardiographic Evaluation of Ventricular Function—For the Neonatologist and Pediatric Intensivist. *Front Pediatr.* 2018;6(79).
66. Park MK. *Park's Pediatric Cardiology for Practitioners.* 6th editio. Elsevier Inc.; 2014.
67. Farmakis D, Giakoumis A, Angastiniotis M, Eleftheriou A. The changing epidemiology of the ageing thalassaemia populations: A position statement of the Thalassaemia International Federation. *Eur J Haematol.* 2020;105:16–23.
68. Nikkilä A, Lohi O, Nieminen N, Csonka P. Trends in ferritin measurements in children and adolescents: A Finnish 9-year observational study. *Acta Paeditrica.* 2022;111(10):1933-1940.
69. Permadi SS, Renarti L, Rachmadi D. Correlation between Serum Ferritin, Serum Cystatin C, and Renal Function in Children with β Thalassemia Major. *Maj Kedokt Bandung.* 2019;51(3):160-164.
70. Atmakusuma TD, Kalwani R, Nasution SA, Rumende CM. Correlation of Serum Ferritin and Cardiac Iron Toxicity with Cardiac Function in Transfusion Dependent Beta-Thalassemia Major Patients. *Acta Med Indones.* 2021;53(3).
71. Heris HK, Nejati B, Rezazadeh K, et al. Evaluation of iron overload by cardiac and liver T2*in β -thalassemia: Correlation with serum ferritin, heart function and liver enzymes. *J Cardiovasc Thorac Res.* 2021;13(1):54-60. doi:10.34172/jcvtr.2021.18
72. Safniyat S, Shakibazad N, Haghpanah S, et al. Parameters of tissue iron overload and cardiac function in patients with thalassemia major and intermedia. *Acta Haematol Pol.* 2020;51(2):95-101. doi:10.2478/ahp-2020-0018

73. Mahrani Y, Nova R, Saleh MI, Rahadiano KY. Correlation of heart failure severity and N-terminal pro-brain natriuretic peptide level in children. *Paediatr Indones.* 2016;56(6).

74. Hall C. Essential biochemistry and physiology of (NT-pro)BNP. *Eur JHeart Fail.* 2004;6(3):257-260.

75. Condello G, Chen CY. The role of brain natriuretic peptide

during strenuous endurance

76. Kremastinos DT, Tsiapras DP, Kostopoulou AG, Hamodraka ES, Chaidaroglou AS, Kapsali ED. NT-proBNP levels and diastolic dysfunction in β -Thalassaemia major patients. *Eur J Heart Fail.* 2007;9(5):531-536.

77. Widyanto D, Priyatno A, Tamam M. Faktor yang Memengaruhi Kadar NT- proBNP pada Anak dengan PJB Pirau Kiri ke Kanan yang Mengalami Gagal Jantung. *Sari Pediatr.* 2016;17(3):216.

doi:10.14238/sp17.3.2015.216-21

