

DAFTAR PUSTAKA

1. Ge H, Wang X, Yuan X, Xiao G, Wang C, Deng T, et al. The epidemiology and clinical information about COVID-19. *Eur J Clin Microbiol Infect Dis*. 2020 Jun;39(6):1011–9.
2. COVID-19 WRP. Peta Sebaran [Internet]. covid19.go.id. [cited 2021 Jun 25]. Available from: <https://covid19.go.id/peta-sebaran>
3. Esposito L, Cancro FP, Silverio A, Di Maio M, Iannece P, Damato A, et al. COVID-19 and acute coronary syndromes: from pathophysiology to clinical perspectives. Horowitz JD, editor. *Oxidative Medicine and Cellular Longevity*. 2021 Aug 30;2021:1–13.
4. Shorikova' 'Dina V., Shorikov' 'Eugene I. COVID-19 and acute coronary syndrome: emphasis on ACS without atherothrombosis [Internet]. Vol. 21. [cited 2022 Jan 17].
5. Wang D, Hu B, Hu C, Zhu F, Liu X, Zhang J, et al. Clinical characteristics of 138 hospitalized patients with 2019 novel coronavirus–infected pneumonia in Wuhan, China. *JAMA*. 2020 Mar 17;323(11):1061.
6. Stefanini GG, Montorfano M, Trabattoni D, Andreini D, Ferrante G, Ancona M, et al. ST-elevation myocardial infarction in patients with COVID-19: clinical and angiographic outcomes. *Circulation*. 2020 Jun 23;141(25):2113–6.
7. Soumya RS, Unni TG, Raghu KG. Impact of COVID-19 on the cardiovascular system: a review of available reports. *Cardiovasc Drugs Ther*. 2021 Jun;35(3):411–25.
8. Li Y, Liu T, Tse G, Wu M, Jiang J, Liu M, et al. Electrocardiographic characteristics in patients with coronavirus infection: A single-center observational study. *Ann Noninvasive Electrocardiol* [Internet]. 2020 Nov [cited 2021 Oct 26];25(6).
9. Liu PP, Blet A, Smyth D, Li H. The science underlying COVID-19: implications for the cardiovascular system. *Circulation*. 2020 Jul 7;142(1):68–78.
10. Babapoor-Farrokhran S, Gill D, Walker J, Rasekhi RT, Bozorgnia B, Amanullah A. Myocardial injury and COVID-19: possible mechanisms. *Life Sciences*. 2020 Jul;253:117723.
11. Cronin M, Wheen P, Armstrong R, Kumar R, McMahon A, White M, et al. CT coronary angiography and COVID-19: inpatient use in acute chest pain service. *Open Heart*. 2021 Mar;8(1):e001548.
12. Fardman A, Zahger D, Orvin K, Oren D, Kofman N, Mohsen J, et al. Acute myocardial infarction in the COVID-19 era: incidence, clinical characteristics and in-hospital outcomes—A multicenter registry. den Uil C, editor. *PLoS ONE*. 2021 Jun 18;16(6):e0253524.
13. WHO Coronavirus (COVID-19) Dashboard [Internet]. [cited 2021 Jun 25]. Available from: <https://covid19.who.int>

14. Bavishi C, Bonow RO, Trivedi V, Abbott JD, Messerli FH, Bhatt DL. Special Article - Acute myocardial injury in patients hospitalized with COVID-19 infection: A review. *Progress in Cardiovascular Diseases*. 2020 Sep;63(5):682–9.
15. Rashid M, Wu J, Timmis A, Curzen N, Clarke S, Zaman A, et al. Outcomes of COVID-19-positive acute coronary syndrome patients: A multisource electronic healthcare records study from England. *J Intern Med*. 2021 Jul;290(1):88–100.
16. Yuki K, Fujiogi M, Koutsogiannaki S. COVID-19 pathophysiology: A review. *Clinical Immunology*. 2020 Jun;215:108427.
17. World Health Organization. Transmission of SARS-CoV-2: implications for infection prevention precautions: scientific brief, 09 July 2020 [Internet]. Geneva: World Health Organization; 2020 [cited 2021 Sep 4].
18. Fadl N, Ali E, Salem TZ. COVID-19: risk factors associated with infectivity and severity. *Scand J Immunol* [Internet]. 2021 Jun [cited 2021 Sep 4];93(6).
19. Verdecchia P, Cavallini C, Spanevello A, Angeli F. The pivotal link between ACE2 deficiency and SARS-CoV-2 infection. *European Journal of Internal Medicine*. 2020 Jun;76:14–20.
20. Kassir R. Risk of COVID-19 for patients with obesity. *Obesity Reviews* [Internet]. 2020 Jun [cited 2021 Sep 4];21(6).
21. Pal R, Bhansali A. COVID-19, diabetes mellitus and ACE2: The conundrum. *Diabetes Research and Clinical Practice*. 2020 Apr;162:108132.
22. Ouchetto O, Drissi Bourhanbour A. Risk factors of COVID-19 patients. *Disaster med public health prep*. 2021 Jan 8;1–3.
23. Kumar A, Cannon CP. Acute coronary syndromes: diagnosis and management, part I. *Mayo Clin Proc*. 2009 Oct;84(10):917–38.
24. O’Gara PT, Kushner FG, Ascheim DD, Casey DE, Chung MK, de Lemos JA, et al. 2013 ACCF/AHA Guideline for the management of ST-elevation myocardial infarction: executive summary: a report of the American college of cardiology foundation/American heart association task force on practice guidelines. *Circulation*. 2013 Jan 29;127(4):529–55.
25. Stroobandt R, Barold SS, Sinnaeve AF. ECG from basics to essentials: step by step. Chichester, West Sussex, UK : John Wiley & Sons, Inc; 2016. p.438
26. Kang Y, Chen T, Mui D, Ferrari V, Jagasia D, Scherrer-Crosbie M, et al. Cardiovascular manifestations and treatment considerations in COVID-19. *Heart*. 2020 Aug;106(15):1132–41.
27. Tajbakhsh A, Gheibi Hayat SM, Taghizadeh H, Akbari A, inabadi M, Savardashtaki A, et al. COVID-19 and cardiac injury: clinical manifestations, biomarkers, mechanisms, diagnosis, treatment, and follow up. *Expert Review of Anti-infective Therapy*. 2021 Mar 4;19(3):345–57.

28. Lilly LS, Harvard Medical School, editors. Pathophysiology of heart disease: a collaborative project of medical students and faculty. Edition 6. Philadelphia: Wolters Kluwer; 2016. p 467.
29. Antman EM, Tanasijevic MJ, Thompson B, Schactman M, McCabe CH, Cannon CP, et al. Cardiac-specific troponin I levels to predict the risk of mortality in patients with acute coronary syndromes. *N Engl J Med*. 1996 Oct 31;335(18):1342–9.
30. Churchhouse A, Ormerod J. *Kardiologi dan kelainan vaskular*. 1st ed. Kalim H, editor. Jakarta: Elsevier; 2017. p.463
31. Seligman H, Sen S, Nijjer S, Al-Lamee R, Clifford P, Sethi A, et al. Management of acute coronary syndromes during the coronavirus disease 2019 pandemic: deviations from guidelines and pragmatic considerations for patients and healthcare workers. *Interv Cardiol*. 2020 Nov 24;15:e16.
32. Imazio M, Klingel K, Kindermann I, Brucato A, De Rosa FG, Adler Y, et al. COVID-19 pandemic and troponin: indirect myocardial injury, myocardial inflammation or myocarditis? *Heart*. 2020 Aug;106(15):1127–31.
33. Liu Y, Du X, Chen J, Jin Y, Peng L, Wang HHX, et al. Neutrophil-to-lymphocyte ratio as an independent risk factor for mortality in hospitalized patients with COVID-19. *Journal of Infection*. 2020 Jul;81(1):e6–12.
34. Wang W, Shen M, Tao Y, Fairley CK, Zhong Q, Li Z, et al. Elevated glucose level leads to rapid COVID-19 progression and high fatality. *BMC Pulm Med*. 2021 Dec;21(1):64.
35. Yu HH, Qin C, Chen M, Wang W, Tian DS. D-dimer level is associated with the severity of COVID-19. *Thrombosis Research*. 2020 Nov;195:219–25.
36. Lin Z, Long F, Yang Y, Chen X, Xu L, Yang M. Serum ferritin as an independent risk factor for severity in COVID-19 patients. *Journal of Infection*. 2020 Oct;81(4):647–79.
37. Lippi G, Plebani M. Procalcitonin in patients with severe coronavirus disease 2019 (COVID-19): A meta-analysis. *Clinica Chimica Acta*. 2020 Jun;505:190–1.
38. Perhimpunan Dokter Spesialis Kardiovaskular Indonesia. *Pedoman tatalaksana sindrom koroner akut*. Edisi 4. Jakarta. Centra Communications; 2018.p 88
39. Long B, Brady WJ, Bridwell RE, Ramzy M, Montrieff T, Singh M, et al. Electrocardiographic manifestations of COVID-19. *The American Journal of Emergency Medicine*. 2021 Mar;41:96–103.
40. Scanlon PJ, Faxon DP, Audet AM, Carabello B, Dehmer GJ, Eagle KA, et al. ACC/AHA Guidelines for coronary angiography: executive summary and recommendations: a report of the American college of cardiology/American heart association task force on practice guidelines (committee on coronary angiography) developed in collaboration with the society for cardiac angiography and Interventions. *Circulation*. 1999 May 4;99(17):2345–57.

41. Mann DL, Zipes DP, Libby P, Bonow RO, Braunwald E, editors. Braunwald's heart disease: a textbook of cardiovascular medicine. Tenth edition. Philadelphia, PA: Elsevier/Saunders; 2015. p 2032.
42. Wicaksono SH, Kasim M, Nugroho J, Zamzami CA, Sahara E, Gharini P, et al. Panduan interpretasi dan pelaporan angiografi koroner dengan tomografi komputer. Indonesian Journal of Cardiology. 2016;107–16.
43. Wangko LC, Budiono B, Lefrandt RL. Angiografi koroner indikasi, kontraindikasi, dan proteksi terhadap radiasi. JBM [Internet]. 2013 Feb 4 [cited 2021 Aug 18];4(3).
44. Lima RSL, Watson DD, Goode AR, Siadaty MS, Ragosta M, Beller GA, et al. Incremental value of combined perfusion and function over perfusion alone by gated SPECT myocardial perfusion imaging for detection of severe three-vessel coronary artery disease. Journal of the American College of Cardiology. 2003 Jul;42(1):64–70.
45. Smith JN, Negrelli JM, Manek MB, Hawes EM, Viera AJ. Diagnosis and management of acute coronary syndrome: an evidence-based update. The Journal of the American Board of Family Medicine. 2015 Mar 1;28(2):283–93.
46. Dahlan MS. Besar sampel dan cara pengambilan sampel dalam penelitian kedokteran dan kesehatan. 3rd ed. Jakarta: Salemba Medika; 2010. p 225.
47. D'Agostino RB, Vasan RS, Pencina MJ, Wolf PA, Cobain M, Massaro JM, et al. General cardiovascular risk profile for use in primary care: the framingham heart study. Circulation. 2008 Feb 12;117(6):743–53.
48. Kite TA, Ludman PF, Gale CP, Wu J, Caixeta A, Mansourati J, et al. International prospective registry of acute coronary syndromes in patients with COVID-19. Journal of the American College of Cardiology. 2021 May;77(20):2466–76.
49. Choudry FA, Hamshere SM, Rathod KS, Akhtar MM, Archbold RA, Guttman OP, et al. High thrombus burden in patients with COVID-19 presenting with ST-segment elevation myocardial infarction. Journal of the American College of Cardiology. 2020 Sep;76(10):1168–76.
50. Matsushita K, Hess S, Marchandot B, Sato C, Kim NT, Weiss A, et al. Clinical features of patients with acute coronary syndrome during the COVID-19 pandemic. J Thromb Thrombolysis. 2021 Jul;52(1):95–104.
51. Zhou F, Yu T, Du R, Fan G, Liu Y, Liu Z, et al. Clinical course and risk factors for mortality of adult inpatients with COVID-19 in Wuhan, China: a retrospective cohort study. Lancet. 2020 Mar 28;395(10229):1054–62.
52. Biswas M, Rahaman S, Biswas TK, Haque Z, Ibrahim B. Association of sex, age, and comorbidities with mortality in COVID-19 patients: a systematic review and meta-analysis. Intervirology. 2021;64(1):36–47.
53. Jousilahti P, Vartiainen E, Tuomilehto J, Puska P. Sex, Age, Cardiovascular risk factors, and coronary heart disease: a prospective follow-up study of 14

- 786 middle-aged men and women in Finland. *Circulation*. 1999 Mar 9;99(9):1165–72.
54. Mauvais-Jarvis F, Klein SL, Levin ER. Estradiol, progesterone, immunomodulation, and COVID-19 outcomes. *Endocrinology*. 2020 Sep 1;161(9):127.
 55. Guan W jie, Liang W hua, Zhao Y, Liang H rui, Chen Z sheng, Li Y min, et al. Comorbidity and its impact on 1590 patients with COVID-19 in China: a nationwide analysis. *Eur Respir J*. 2020 May;55(5):2000547.
 56. Peng M, He J, Xue Y, Yang X, Liu S, Gong Z. Role of Hypertension on the Severity of COVID-19: A Review. *Journal of Cardiovascular Pharmacology*. 2021 Nov;78(5):e648–55.
 57. Guzik TJ, Mohiddin SA, Dimarco A, Patel V, Savvatis K, Marelli-Berg FM, et al. COVID-19 and the cardiovascular system; implications for risk assessment, diagnosis, and treatment options. *Cardiovascular Research*. 2020 Aug 1;116(10):1666–87.
 58. Hamadeh A, Aldujeli A, Briedis K, Tecson KM, Sanz-Sánchez J, Al dujeili M, et al. Characteristics and outcomes in patients presenting with COVID-19 and ST-segment elevation myocardial infarction. *The American Journal of Cardiology*. 2020 Sep;131:1–6.
 59. Franck C, Filion KB, Eisenberg MJ. Smoking cessation in patients with acute coronary syndrome. *The American Journal of Cardiology*. 2018 May;121(9):1105–11.
 60. Shi S, Qin M, Shen B, Cai Y, Liu T, Yang F, et al. Association of cardiac injury with mortality in hospitalized patients with COVID-19 in Wuhan, China. *JAMA Cardiol*. 2020 Jul 1;5(7):802.
 61. Lima-Martínez MM, Carrera Boada C, Madera-Silva MD, Marín W, Contreras M. COVID-19 y diabetes mellitus: una relación bidireccional. *Clínica e Investigación en Arteriosclerosis*. 2021 May;33(3):151–7.
 62. Tartof SY, Qian L, Hong V, Wei R, Nadjafi RF, Fischer H, et al. Obesity and mortality among patients diagnosed with COVID-19: results from an integrated health care organization. *Ann Intern Med*. 2020 Nov 17;173(10):773–81.
 63. Dhungana SP, Mahato AK, Ghimire R, Shreewastav RK. Prevalence of dyslipidemia in patients with acute coronary syndrome admitted at tertiary care hospital in Nepal: a descriptive cross-sectional study. *J Nepal Med Assoc [Internet]*. 2020 Apr 30 [cited 2022 Mar 15];58(224).
 64. Tang Y, Hu L, Liu Y, Zhou B, Qin X, Ye J, et al. Possible mechanisms of cholesterol elevation aggravating COVID-19. *Int J Med Sci*. 2021;18(15):3533–43.
 65. Wahrenberg A, Magnusson PK, Discacciati A, Ljung L, Jernberg T, Frick M, et al. Family history of coronary artery disease is associated with acute coronary syndrome in 28,188 chest pain patients. *European Heart Journal Acute Cardiovascular Care*. 2020 Oct 1;9(7):741–7.

66. Samidurai A, Das A. Cardiovascular complications associated with COVID-19 and potential therapeutic strategies. *IJMS*. 2020 Sep 16;21(18):6790.
67. Guedeney P, Sorrentino S, Claessen B, Mehran R. The link between anemia and adverse outcomes in patients with acute coronary syndrome. *Expert Review of Cardiovascular Therapy*. 2019 Mar 4;17(3):151–9.
68. Zhu B, Feng X, Jiang C, Mi S, Yang L, Zhao Z, et al. Correlation between white blood cell count at admission and mortality in COVID-19 patients: a retrospective study. *BMC Infect Dis*. 2021 Dec;21(1):574.
69. Meeuwssen JAL, Wesseling M, Hoefler IE, de Jager SCA. Prognostic value of circulating inflammatory cells in patients with stable and acute coronary artery disease. *Front Cardiovasc Med*. 2017 Jul 14;4:44.
70. Bangalore S, Sharma A, Slotwiner A, Yatskar L, Harari R, Shah B, et al. ST-segment elevation in patients with Covid-19 - A Case Series. *N Engl J Med*. 2020 Jun 18;382(25):2478–80.
71. Huang C, Wang Y, Li X, Ren L, Zhao J, Hu Y, et al. Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. *The Lancet*. 2020 Feb;395(10223):497–506.
72. Terpos E, Ntanasis-Stathopoulos I, Elalamy I, Kastritis E, Sergentanis TN, Politou M, et al. Hematological findings and complications of COVID-19. *Am J Hematol*. 2020 Jul;95(7):834–47.
73. Frater JL, Zini G, d’Onofrio G, Rogers HJ. COVID-19 and the clinical hematology laboratory. *Int J Lab Hematol*. 2020 Jun;42(S1):11–8.
74. Huang G, Zhong XN, Zhong B, Chen YQ, Liu ZZ, Su L, et al. Significance of white blood cell count and its subtypes in patients with acute coronary syndrome. *European Journal of Clinical Investigation*. 2009 May;39(5):348–58.
75. Chen N, Zhou M, Dong X, Qu J, Gong F, Han Y, et al. Epidemiological and clinical characteristics of 99 cases of 2019 novel coronavirus pneumonia in Wuhan, China: a descriptive study. *The Lancet*. 2020 Feb;395(10223):507–13.
76. Afari ME, Bhat T. Neutrophil to lymphocyte ratio (NLR) and cardiovascular diseases: an update. *Expert Review of Cardiovascular Therapy*. 2016 May 3;14(5):573–7.
77. Xu P, Zhou Q, Xu J. Mechanism of thrombocytopenia in COVID-19 patients. *Ann Hematol*. 2020 Jun;99(6):1205–8.
78. Hu R, Han C, Pei S, Yin M, Chen X. Procalcitonin levels in COVID-19 patients. *International Journal of Antimicrobial Agents*. 2020 Aug;56(2):106051.