

DAFTAR PUSTAKA

1. Shpichka A, Butnaru D, Bezrukov EA, Sukhanov RB, Atala A, Burdukovskii V, et al. Skin tissue regeneration for burn injury. *Stem Cell Res Ther.* 2019;10(1):1–16.
2. Depkes RI. Pedoman Nasional Pelayanan Kedokteran Tatalaksana Luka Bakar. Jakarta; 2019.
3. Muslim S, Saputra D, Asri A. Gambaran Karakteristik Pasien Luka Bakar Listrik di Rawat Inap RSUP Dr. M.Djamil Padang Tahun 2016-2019. *J Ilmu Kesehat Indones.* 2021;1(3):412–8.
4. Roshangar L, Rad JS, Kheirjou R, Ranjkesh MR, Khosroshasi AF. Skin burns: review of molecular mechanisms and therapeutic Approaches. 2019;31(12):308–15.
5. Kemenkes RI. Laporan nasional riset kesehatan dasar. Kementerian Kesehat RI. 2018;1–582.
6. Masyfuk ZJ. Pengaruh pemberian ekstrak gambir (*Uncaria gambir*) terhadap penyembuhan luka bakar derajat IIA mencit (*Mus musculus*) [Skripsi]. Universitas Andalas; 2017.
7. Khairani L. Asuhan keperawatan luka bakar listrik pada Tn. A dengan aplikasi aromaterapi mawar di ruang luka bakar RSUP Dr. M. Djamil Padang [Diploma thesis]. Universitas Andalas; 2017.
8. Stone R, Natesan S, Kowalczewski CJ, Mangum LH, Clay NE, Clohessy RM, et al. Advancements in regenerative strategies through the continuum of burn care. *Front Pharmacol.* 2018;9(JUL).
9. Primadina N, Basori A, Perdanakusuma DS. Proses penyembuhan luka ditinjau dari aspek mekanisme seluler dan molekuler. *Qanun Med - Med J Fac Med Muhammadiyah Surabaya.* 2019;3(1):31–43.
10. Krafts KP. Tissue repair: The hidden drama. *Organogenesis.* 2010;6(4):225–33.
11. Martins-Green M, Petreaca M, Wang L. Chemokines and their receptors are key players in the orchestra that regulates wound healing. *Adv Wound Care.* 2013;2(7):327–47.
12. Simarmata M, Nurhaida. Faktor penghambat penyembuhan luka di rs melati perbaungan. *J Online Keperawatan Indones.* 2021;4(1):1–6.
13. Baltzis D, Eleftheriadou I, Veves A. Pathogenesis and treatment of impaired wound healing in diabetes mellitus: new insights. *Adv Ther.* 2014;31(8):817–36.
14. Tanuwijaya PA, Ketut Berata I, Agung A, Jayawardhita G. Pemberian Gel Ekstrak Daun Binahong dalam Proses Angiogenesis Penyembuhan Luka Insisi pada Mencit Hiperglikemia. *Indones Med Veterinus Juli.* 2019;8(4):2477–6637.
15. Anggraeni D, Airin CM, Raharjo S. The effectiveness of ethanol extract of binahong leaves on diabetic wound healing. *J Kedokt Hewan - Indones J Vet Sci.* 2018;11(4):146–52.
16. Adhya A, Bain J, Dutta G, Hazra A, Majumdar B, Ray O, et al. Healing of

- burn wounds by topical treatment: A randomized controlled comparison between silver sulfadiazine and nano-crystalline silver. *J Basic Clin Pharm.* 2015;6(1):29.
17. Qian LW, Fourcaudot AB, Leung KP. Silver Sulfadiazine Retards Wound Healing and Increases Hypertrophic Scarring in a Rabbit Ear Excisional Wound Model. *J Burn Care Res.* 2017;38(1):e418–22.
 18. Hu MS, Leavitt T, Malhotra S, Duscher D, Pollhammer MS, Walmsley GG, et al. Stem cell-based therapeutics to improve wound healing. *Plast Surg Int.* 2015;2015:1–7.
 19. Hartono B. Sel Punca : karakteristik , potensi dan aplikasinya. *J Kedokt Meditek.* 2016;22(60):72–5.
 20. Sierra-Sánchez Á, Montero-Vilchez T, Quiñones-Vico MI, Sanchez-Diaz M, Arias-Santiago S. Current advanced therapies based on human mesenchymal stem cells for skin diseases. *Front Cell Dev Biol.* 2021;9(March).
 21. Revilla G. Pengaruh bone marrow mesenchymal stem cells terhadap sekresi VEGF pada penyembuhan luka bakar tikus. *J Kesehat Andalas.* 2018;6(3):702.
 22. Chen JS, Wong VW, Gurtner GC. Therapeutic potential of bone marrow-derived mesenchymal stem cells for cutaneous wound healing. *Front Immunol.* 2012;3(JUL):1–9.
 23. Kareem NA, Aijaz A, Jeschke MG. Stem cell therapy for burns: story so far. *Biol Targets Ther.* 2021;15:379–97.
 24. Lee DE, Ayoub N, Agrawal DK. Mesenchymal stem cells and cutaneous wound healing: Novel methods to increase cell delivery and therapeutic efficacy. *Stem Cell Res Ther.* 2016;7(1):1–8.
 25. Li Z, Maitz P. Cell therapy for severe burn wound healing. *Burn Trauma.* 2018;6:1–10.
 26. Jackson WM, Nesti LJ, Tuan RS. Concise review: clinical translation of wound healing therapies based on mesenchymal stem cells. *Stem Cells Transl Med.* 2012;1(1):44–50.
 27. Nguyen A V., Soulika AM. The dynamics of the skin's immune system. *Int J Mol Sci.* 2019;20(8):1–53.
 28. Mescher AL. *Junqueira's Basic Histology Text and Atlas.* 14th ed. New York: McGraw-Hill Education; 2016. 371–381 p.
 29. Sherwood L. *Introduction to Human physiology, edisi internasional.* 8th ed. 2013. 472–475 p.
 30. Kang S, Amagai M, Bruckner AL, Enk AH, Margolis DJ, McMichael AJ, et al. *Fitzpatrick's Dermatology.* 9 th ed. New York: McGraw-Hill Education; 2019.
 31. Kalangi SJR. Histofisiologi kulit. *J Biomedik.* 2014;5(3):12–20.
 32. Rahardi R. *Anatomi dan faal kulit. ilmu penyakit kulit dan kelamin.* 7th ed. FK UI; 2017. 3–6 p.
 33. ANZBA. *Emergency management of severe burns.* 17th editi. *Journal of Paramedic Practice.* 2013. 1–97 p.
 34. Evers LH, Bhavsar D, Mailander P. *The biology of burn injury.* *Exp Dermatol.* 2010;19(9):777–83.
 35. American College of Surgeons. *Advanced trauma life support.* 10th ed.

- Cicago: The Committee on Trauma. 2018. 474 p.
36. Tiwari VK. Burn wound: How it differs from other wounds. *Indian J Plast Surg.* 2012;45(2):364–73.
 37. Kaddoura I, Ibrahim A, Karamanoukian R, Papazian N. Burn injury : review of pathophysiology and therapeutic modalities in major burns. 2017;XXX(June):95–102.
 38. Yolanda M-M. Adult stem cell therapy in chronic wound healing. *J Stem Cell Res Ther.* 2014;04(01):1–6.
 39. Kohn TJ, DiPetro LA. Inflammation and wound healing: The role of the macrophage. *Expert Rev Mol Med.* 2013;13:1–14.
 40. Gonzalez ACDO, Andrade ZDA, Costa TF, Medrado ARAP. Wound healing - A literature review. *An Bras Dermatol.* 2016;91(5):614–20.
 41. Bartmann CP. Equine wound management. *Prakt Tierarzt.* 2018;99(8):792–3.
 42. Alhaji M, Bansal P, Goyal A. Physiology, Granulation Tissue. 2020;
 43. Leong M, Phillips LG 2012. Wound Healing. Dalam: Sabiston Textbook of Surgery. 19th ed. Amsterdam: Elsevier Saunders;
 44. Franz MG (2010). Wound healing. Dalam: Doherty GM, Thompson NW. Current diagnosis and treatment surgery. 13th ed. Companies M-H, editor. USA;
 45. Oki AS, Bimarahmanda ME, Rahardjo MB. Increased number of fibroblasts and neovascularization after tooth extraction in wistar rats with moderate-intensity continuous exercise. *J Int Dent Med Res.* 2018;11(3):840–5.
 46. Purnamasari D. Diagnosis dan klasifikasi diabetes mellitus. In: Buku Ajar Ilmu Penyakit Dalam. 2014. p. 2325–9.
 47. Dipiro JT, Talbert RL, Yee GC, Matzke GR, Wells BG, Posey LM. Pharmacotherapy: a pathophysiologic approach. 7th ed. New York: Mc Graw Hill Medical; 2011. 1205–1211 p.
 48. Harahap AS, Herman RB, Yerizel E. Gambaran glukosa darah setelah latihan fisik pada tikus wistar diabetes melitus yang diinduksi aloksan. *J Kesehat Andalas.* 2015;4(1):23–9.
 49. Muqsita V, Sakinah EN, Santosa A. Efek Ekstrak Etanol Kayu Manis (*Cinnamomum burmannii*) terhadap Kadar MDA Ginjal pada Tikus Wistar Hiperglikemi (The Effect of Cinnamon (*Cinnamomum burmannii*) Ethanolic Extract on Kidney MDA in Hyperglycemic Wistar Rats). *e-Jurnal Pustaka Kesehat.* 2015;3(2):235–8.
 50. Prameswari OM, Widjanarko SB. Uji efek ekstrak air daun pandan wangi terhadap penurunan kadar glukosa darah dan histopatologi tikus diabetes melitus. *J Pangan dan Agroindustri.* 2014;2(2):16–27.
 51. Akrom, Harjanti P., Armansyah T. Efek hipoglikemik ekstrak etanol umbi ketela rambat (*ipomoea batatas p*) (EEUKR) pada mencit swiss yang diinduksi aloksan. *pharmaciana.* 2014;4(1):65–76.
 52. Banjarnahor E, Wangko S. Sel beta pankreas sintesis dan sekresi insulin. *J Biomedik.* 2013;4(3).
 53. Soelistijo SA, Lindarto D, Decroli E, Permana H, Sucipto KW, Kusnadi Y, et al. Pedoman pengelolaan dan pencegahan diabetes melitus tipe 2 dewasa di

- indonesia 2019. *Perkumpulan Endokrinologi Indonesia*. 2019. 1–117 p.
54. Okonkwo UA, Dipietro LA. Diabetes and wound angiogenesis. *Int J Mol Sci*. 2017;18(7):1–15.
 55. Zhang XN, Ma ZJ, Wang Y, Sun B, Guo X, Pan CQ, et al. Angelica dahurica ethanolic extract improves impaired wound healing by activating angiogenesis in diabetes. *PLoS One*. 2017;12(5):1–18.
 56. Rairisti A, Wahdaningsih S, Wicaksono A. Uji Aktivitas Ekstrak Etanol Biji Pinang (*Areca catechu L.*). *Naskah Publ*. 2014;1(1):1–24.
 57. Singer AJ, Boyce ST. Burn wound healing and tissue engineering. *J Burn Care Res*. 2017;38(3):e605–13.
 58. Rantam FA, Ferdiansyah, Purwati. *Stem cell: mesenchymal, hematopoetik, dan model aplikasi*. 2nd ed. Airlangga University Press; 2014. 280 p.
 59. Zakrzewski W, Dobrzynski M, Szymonowicz M, Rybak Z. Stem cells: past, present, and future. *IEEEJ Trans Fundam Mater*. 2019;128:1–22.
 60. Sureda K. Bone Marrow-Derived Mesenchymal Stem Cell (BM-MSK) sebagai sumber alternatif sel blastema terhadap regenerasi anggota tubuh. *J Ilm Kesehat Sandi Husada*. 2019;10(2):325–30.
 61. Rajabzadeh N, Fathi E, Farahzadi R. Stem cell-based regenerative medicine. *Stem Cell Investig*. 2019;6(July).
 62. Linard C, Brachet M, Strup-Perrot C, L’homme B, Busson E, Squiban C, et al. Autologous bone marrow mesenchymal stem cells improve the quality and stability of vascularized flap surgery of irradiated skin in pigs. *Stem Cells Transl Med*. 2018;7(8):569–82.
 63. Hardoko. Pengaruh Komsumsi Kappa-Karagenan Terhadap Glukosa Darah Tikus Wistar (*Ratus norvegicus*) Diabetes. *J Teknol dan Ind Pangan*. 2006;XVII(1):67–75.
 64. World Health Organization. *General guidelines for methodologies on research and evaluation of traditional medicine world health organization*. Geneva World Health Organization. 2000.
 65. Rinendyaputri R, Noviantari A. Produksi mesenchymal stem cell (MSC) dari sumsum tulang belakang mencit. *J Biotek Medisiana Indones*. 2015;4(1):33–41.
 66. Isrofah, Sagiran, Afandi M. Efektifitas salep ekstrak daun binahong (*Anredera cordifolia* (ten) steenis) terhadap proses penyembuhan luka bakar derajat 2 termal pada tikus putih (*rattus novergicus*). *muhammadiyah J Nurs*. 2015;1–13.
 67. Kiernan JA. *Histological and histochemical methods, theory and practice*, 5 th ed. *J Anat*. 2016;228(5):887–887.
 68. Velnar T, Bailey T, Smrkolj V. The wound healing process: An overview of the cellular and molecular mechanisms. *J Int Med Res*. 2019;37(5):1528–42.
 69. Fitria M, Saputra D, Revilla G. Pengaruh papain getah pepaya terhadap pembentukan jaringan granulasi pada penyembuhan luka bakar tikus percobaan. *J Kesehat Andalas*. 2014;3(1):73–6.
 70. Gurtner GC (2007). *Wound healing normal and abnormal*. In: Thorne CH, Beasley RW, Aston SJ, Bartlett SP, Gurtner GC, Spear SL Grabb and Smith’s plastic surgery. 6th ed. Philadelphia: Lippincolt Williams and Wilkins; 2007.

- p. 15–22.
71. Hasibuan, Lisa Y, Soedjana H B (2010). Luka. Dalam: Sjamsuhidajat R, Karnadihardja W, Prasetyono T, Rudiman R. Buku ajar ilmu bedah. 3rd ed. EGC; 95–110 p.
 72. Broughton G, Janis JE, Attinger CE. The basic science of wound healing. *Plast Reconstr Surg.* 2006;117(7 SUPPL.):12–34.
 73. Fridoni M, Kouhkeheil R, Abdollahifar MA, Amini A, Ghatrehsamani M, Ghoreishi SK, et al. Improvement in infected wound healing in type 1 diabetic rat by the synergistic effect of photobiomodulation therapy and conditioned medium. *J Cell Biochem.* 2019;120(6):9906–16.
 74. Jiang D, Scharffetter-Kochanek K. Mesenchymal Stem Cells Adaptively Respond to Environmental Cues Thereby Improving Granulation Tissue Formation and Wound Healing. *Front Cell Dev Biol.* 2020;8(July):1–13.
 75. Abbas OL, Özatik O, Gönen ZB, Ögüt S, Entok E, Özatik FY, et al. Prevention of Burn Wound Progression by Mesenchymal Stem Cell Transplantation: Deeper Insights into Underlying Mechanisms. *Ann Plast Surg.* 2018;81(6):715–24.
 76. Yang H ya, Fierro F, So M, Yoon DJ, Nguyen AV, Gallegos A, et al. Combination product of dermal matrix, human mesenchymal stem cells, and timolol promotes diabetic wound healing in mice. *Stem Cells Transl Med.* 2020;9(11):1353–64.
 77. Hosni Ahmed H, Rashed LA, Mahfouz S, Elsayed Hussein R, Alkaffas M, Mostafa S, et al. Can mesenchymal stem cells pretreated with platelet-rich plasma modulate tissue remodeling in a rat with burned skin? *Biochem Cell Biol.* 2017;95(5):537–48.
 78. Wan J, Xia L, Liang W, Liu Y, Cai Q. Transplantation of bone marrow-derived mesenchymal stem cells promotes delayed wound healing in diabetic rats. *J Diabetes Res.* 2013;2013.
 79. Imbarak N, Abdel-Aziz HI, Farghaly LM, Hosny S. Effect of mesenchymal stem cells versus aloe vera on healing of deep second-degree burn. *Stem Cell Investig.* 2021;8:12–12.
 80. Xu J, Zgheib C, Hodges MM, Caskey RC, Hu J, Liechty KW. Mesenchymal stem cells correct impaired diabetic wound healing by decreasing ECM proteolysis. *Physiol Genomics.* 2017;49(10):541–8.
 81. Barrientos S, Stojadinovic O, Golinko MS, Brem H, Tomic-Canic M. Growth factors and cytokines in wound healing. *Wound Repair Regen.* 2008;16(5):585–601.
 82. Prasetyono TOH. General concept of wound healing. *Med J Indones.* 2009;18(3):208–16.
 83. Afzali L, Mirahmadi-Babaheydari F, Shojaei-Ghahrizjani F, Rahmati S, Shahmoradi B, Banitalebi-Dehkordi M. The Effect of Encapsulated Umbilical Cord-derived Mesenchymal Stem Cells in PRPCryogel on Regeneration of Grade-II Burn Wounds. *Regen Eng Transl Med.* 2022;8(1):75–85.
 84. Oh EJ, Lee HW, Kalimuthu S, Kim TJ, Kim HM, Baek SH, et al. In vivo migration of mesenchymal stem cells to burn injury sites and their therapeutic

- effects in a living mouse model. *J Control Release*. 2018;279:79–88.
85. Kong P, Xie X, Li F, Liu Y, Lu Y. Placenta mesenchymal stem cell accelerates wound healing by enhancing angiogenesis in diabetic Goto-Kakizaki (GK) rats. *Biochem Biophys Res Commun*. 2013;438(2):410–9.
86. Husna F, Suyatna FD, et al. Model Hewan Coba pada Penelitian Diabetes. *Pharm Sci Res*. 2019;6(3):131–41.
87. Kuo YR, Wang CT, Cheng JT, Kao GS, Chiang YC, Wang CJ. Adipose-derived stem cells accelerate diabetic wound healing through the induction of autocrine and paracrine effects. *Cell Transplant*. 2016;25(1):71–81.

