

DAFTAR PUSTAKA

- Addis, R., Cruciani, S., Santaniello, S., Bellu, E., Sarais, G., Ventura, C., Maioli, M., dan Pintore, G., (2020) Fibroblast Proliferation and Migration in Wound Healing by Phytochemicals: Evidence for a Novel Synergic Outcome. *International Journal of Medical Science*. 17(8): 1030–1042.
- Aida, A. N., Zhaifrah, R., Hirawan, H., Widodo, A. H. B., Prihastuti, C. C., dan Wardana, T., (2022) Wound Healing Potential of Forest Honey for Increasing TGF- β 1 Protein Expression in Palatoplasty: In-vivo and In-silico Studies. *Scientific Dental Journal*. 6(1): 25–31.
- Amran, A. G., Alhajj, M. N., dan Amran, A. N., (2016) Prevalence and Risk Factors for Clinical Attachment Loss in Adult Yemenis: A Community-Based Study in the City of Dhamar. *American Journal of Health Research*. 4(3): 56–61.
- Amita, K., Balqis, U., dan Iskandar C.D., (2017) Gambaran Histopatologi Penyembuhan Luka Sayat pada Mencit (*Mus musculus*) Menggunakan Ekstrak Daun Binahong (*Anredera cordifolia* (Tenore) Steenis). *JIMVET*. 1(3): 584–591.
- Andriani, I. dan Chairunnisa, F. A., (2019) Periodontitis Kronis dan Penatalaksanaan Kasus dengan Kuretase. *Insisiva Dental Journal*. 8(1): 25–30.
- Araujo, M. A. R., Libério, S. A., Guerra, R. N. M., Ribeiro, M. N. S., dan Nascimento, F. R. F. (2012) Mechanisms of Action Underlying the Anti-inflammatory and Immunomodulatory Effects of Propolis: A Brief Review. *Revista Brasileira de Farmacognosia*. 22(1): 176–185.
- Aslani, A., Zolfaghari, B., dan Davoodvandi, F., (2016) Design, Formulation and Evaluation of an Oral Gel from Punica Granatum Flower Extract for the Treatment of Recurrent Aphthous Stomatitis. *Advanced Pharmaceutical Bulletin*. 6(3): 391–398.
- AVMA Staff., (2013) *AVMA Guidelines for the Euthanasia of Animals: 2013 Edition*. Illinois: American Veterinary Medical Association. pp. 38.
- Bani, K.S. dan Bhardwaj, K., (2021) Topical Drug Delivery Therapeutics, Drug Absorption and Penetration Enhancement Techniques. *Journal of Drug Delivery and Therapeutics*. 11(4): 105–110.
- Bathla, S., (2017) *Textbook of Periodontics*. 1st ed., New Delhi: Jaypee Brothers Medical Publishers. pp. 12, 19-21, 23, 38.
- Berretta, A. A., Arruda, C., Miguel, F. G., Baptista, N., Nascimento, A. P., Marquele-Oliveira, F., Hori, J. I., Barud, H. S., Damaso, B., Ramos, C., Ferreira, R., dan Bastos, J.K., (2017) Functional Properties of Brazilian Propolis: From Chemical Composition Until the Market. Dalam: Waisundara, V. dan Shiomi., N. ed. *Superfood and Functional Food*. Rijeka: InTech. pp. 57–58.

- Cabezas, R. M., Davideau, J. L., Tenenbaum, H., Huck, O., (2016) Clinical Efficacy of Probiotics as an Adjunctive Therapy to Non-surgical Periodontal Treatment of Chronic Periodontitis: A Systematic Review and Meta-analysis. *Journal of Clinical Periodontology*. 43(6): 520–530.
- Chung, W. C., Huang, C. F., dan Feng, S. W., (2022) Clinical Benefits of Minimally Invasive Non-Surgical Periodontal Therapy as an Alternative of Conventional Non-Surgical Periodontal Therapy—A Pilot Study. *Int J Environ Res Public Health*. 19(12): 1–12.
- Cho, Y. D., Kim, K. H., Lee, Y. M., Ku, Y., dan Seol, Y. J., (2021) Periodontal Wound Healing and Tissue Regeneration: A Narrative Review. *Pharmaceuticals*. 14(456): 1–17.
- De Jong, T., Bakker, A. D., Everts, V., dan Smit, T. H., (2017) The Intricate Anatomy of the Periodontal Ligament and Its Development: Lessons for Periodontal Regeneration. *Journal of Periodontal Research*. 2017:1–10.
- Dinyati, M., dan Adam, A. M., (2016) Kuretase Gingiva sebagai Perawatan Poket Periodontal. *Makassar Dent. J.* 5 (2): 58–64.
- Ermawati, T., Chriestedy, R., Fatimatzzahro, dan Ganadya, A., (2020) Efek Gel Ekstrak Biji Kopi Robusta (*Coffea canephora*) terhadap Jumlah Sel Makrofag dan Limfosit Jaringan Gingiva Tikus Periodontitis. *Insisiva Dental Journal: Majalah Kedokteran Gigi Insisiva*. 9(2): 46–51.
- Farook, F. F., Alodwene, H., Alharbi, R., Alyami, M., Alshahrani, A., Almohammadi, D., Alnasyan, B., dan Aboelmaaty, W. (2020) Reliability Assessment between Clinical Attachment Loss and Alveolar Bone Level in Dental Radiographs. *Clinical and Experimental Dental Research*. 6(6): 596–601.
- Furukawa, M., Wang, J., Kurosawa, M., Ogiso, N., Shikama, Y., Kanekura, T., dan Matsushita, K., (2021) Effect of Green Propolis Extracts on Experimental Aged Gingival Irritation *In Vivo* and *In Vitro*, *Journal of Oral Biosciences*. 63(1): 58–65.
- Harapan, I. K., Ali, A., dan Fione, V. R., (2020) Gambaran Penyakit Periodontal Berdasarkan Umur dan Jenis Kelamin pada Pengunjung Poliklinik Gigi Puskesmas Tikala Baru Kota Manado Tahun 2017. *Jurnal Ilmiah Gigi dan Mulut*. 3(1): 20–26.
- Hariningsih, Y., (2019) Pengaruh Variasi Konsentrasi Na-CMC Terhadap Stabilitas Fisik Gel Ekstrak Pelelep Pisang Ambon (*Musa paradisiaca* L.). *Parapemikir Jurnal Ilmiah Farmasi*. 8(2): 46–51.
- Hasan, A. dan Palmer, R. M., (2014) A Clinical Guide to Periodontology: Pathology of Periodontal Disease. *British Dental Journal*. 216(8): 457–461.
- Hozzein, W. N., Badr, G., Al Ghamdi, A. A., Sayed, A., Al-Waili, N. S., dan Garraud, O., (2015) Topical Application of Propolis Enhances Cutaneous

Wound Healing by Promoting TGF-Beta/Smad-Mediated Collagen Production in a Streptozotocin-Induced Type I Diabetic Mouse Model. *Cellular Physiology and Biochemistry*. 37: 940–954.

Hudson, D. M., Garibov, M., Dixon, D. R., Popowics, T., dan Eyre, D. R., (2017) Distinct Post-Translational Features of Type I Collagen are Conserved in Mouse and Human Periodontal Ligament. *Journal of Periodontal Research*. 52(6): 1042–1049.

Ismardianita, E., Widyawati, Elianora, D., Rosalina, W., Nofrike, L., dan Khairani V. Y., (2020) The Effectiveness Methanol Extract Clausena Excavate on Number of Fibroblast and Density of Collagen Fibers After Tooth Extraction. *Journal of Dentomaxillofacial Science*. 4(3): 170–175.

Isola, G., Polizzi, A., Santonocito, S., Dalessandri, D., Migliorati, M., dan Indelicato, F., (2021) New Frontiers on Adjuvants Drug Strategies and Treatments in Periodontitis. *Scientia Pharmaceutica*. 89(46): 1–16.

Kementerian Kesehatan RI, (2019) Laporan Nasional RISKESDAS 2018. *Badan Penelitian dan Pengembangan Kesehatan*. Jakarta. pp. 204.

Kumar, V., Abbas, A. K., dan Aster, J. C., (2015) *Robbins and Cotran Pathologic Basis of Disease*. 9th ed. Milton: Elsevier. pp. 104.

Kurek-Górecka, A., Rzepecka-Stojko, A., Górecki, M., Stojko, J., Sosada, M., dan Swierczek-Zieba, G., (2013) Structure and Antioxidant Activity of Polyphenols Derived from Propolis. *Molecules (Basel, Switzerland)*. 19(1): 78–101.

Lang, N. P. dan Lindhe, J., (2015) *Clinical Periodontology and Implant Dentistry*. 6th ed., Iowa: Wiley. pp. 523–526.

Liu, J., Ruan, J., Weir, M. D., Ren, K., Schneider, A., Wang, P., Oates, T. W., Chang, X., dan Xu, H., (2019) Periodontal Bone-Ligament-Cementum Regeneration via Scaffolds and Stem Cells. *Cells*. 8(6): 1–24.

López-Valverde, N., Pardal-Peláez, B., López-Valverde, A., Flores-Fraile, J., Herrero-Hernández, S., Macedo-de-Sousa, B., Herrero-Payo, J., dan Ramírez, J.M., (2021) Effectiveness of Propolis in the Treatment of Periodontal Disease: Updated Systematic Review with Meta-Analysis. *Antioxidants*. 10(269): 1–14.

Lunardhi, L. C., Kresnadi, U., dan Agustono, B., (2019) The Effect of a Combination of Propolis Extract and Bovine Bone Graft on the Quantity of Fibroblasts, Osteoblasts and Osteoclasts in Tooth Extraction Sockets. *Majalah Kedokteran Gigi*. 52(3): 126–132.

Mani, A., James, R., dan Mani, S., (2018) Etiology and Pathogenesis of Aggressive Periodontitis: A Mini Review. *Galore International Journal of Health Sciences and Research*. 3(2): 4–8.

Megawati, Yacobus, A. R., dan Akhir, L. O., (2019) Formulasi Dan Uji Stabilitas Fisik Sediaan Gel Ekstrak Kulit Buah Rambutan (*Nephelium lappaceum* L.)

- Sebagai Obat Sariawan Menggunakan Variasi Konsentrasi Basis Carbopol.
Jurnal Farmasi Sandi Karsa. 5(1): 1–10.
- Mescher, A. L., (2016) *Junqueira's Basic Histology Text and Atlas*. 14th ed. New York: McGraw-Hill Education. pp. 96-97, 99.
- Mortazavi, H. dan Baharvand, M., (2016) Review of Common Conditions Associated with Periodontal Ligament Widening. *Imaging Science in Dentistry*. 46(4), 229–237.
- Muñoz-Carrillo, J.L., Hernández-Reyes, V.E., García-Huerta, O.E., ChávezRuvalcaba, F., Chávez-Ruvalcaba, M.I., Chávez-Ruvalcaba, K.M., DíazAlfaro, L., (2019) Pathogenesis of Periodontal Disease. in Yussif, N.M.A. (ed.). *Periodontal Disease-Diagnostic and Adjunctive Non-surgical Considerations*. London: IntechOpen. pp. 4.
- Musfiroh, I., dan Budiman, A. N. H. I., (2013) The Optimization of Sodium Carboxymethyl Cellulose (CMC-Na) Synthesized from Water Hyacinth (*Eichhornia crassipes* (Mart.) Solm) Cellulose. *RJPBCS*. 4(4): 1092–1099.
- Nazir, M. A., (2017) Prevalence of Periodontal Disease, Its Association with Systemic Diseases and Prevention. *International Journal of Health Science*. 11(2): 72–80.
- Nejatzadeh-Barandozi, F., (2013) Antibacterial Activities and Antioxidant Capacity of *Aloe Vera*. *Organic and Medicinal Chemistry Letters*. 3(5): 1–8.
- Newman, M. G., Takei, H. H., Klokkevold, P. R., dan Carranza, F. A., (2019) *Newman and Carranza's Clinical Periodontology*. 13th ed. Beijing: Elsevier. pp. 19, 342.
- Nguyen, P. A. dan Pham, T. A. V., (2018) Effects of Platelet-Rich Plasma on Human Gingival Fibroblast Proliferation and Migration In Vitro. *Journal of Applied Oral Science*. 26: 1–9.
- Nocini, R., Lippi, G., dan Mattiuzzi, C., (2020) Periodontal Disease: The Portrait of an Epidemic. *Journal of Public Health and Emergency*. 4(10): 1–6.
- Nurdiana, Ulya, I., dan Putra, I. P. R. A., (2016) Pengaruh Pemberian Gel Ekstrak Daun Melati (*Jasminum sambac* L. Ait) terhadap Jumlah Fibroblas Kulit dalam Penyembuhan Luka Bakar Derajat II A pada Tikus Putih (*Rattus norvegicus*) Galur Wistar. *Jurnal Ilmu Keperawatan*. 4(1): 1–11.
- Olivia, N. dan Herawati, D., (2020) Gingival Curettage for the Management of Chronic Periodontitis: A Case Report. *KnE Medicine*. 2020: 370–376.
- Parker, C. C., Chen, H., Flagel, S. B., Geurts, A. M., Richards, J. B., Robinson, T. E., Solberg Woods, L. C., dan Palmer, A. A., (2014), Rats are the Smart Choice: Rationale for a Renewed Focus on Rats in Behavioral Genetics. *Neuropharmacology*. 76: 250–258.

- Parolia, A., Bapat, R. A., Chaubal, T., Yang, H. J., Panda, S., Mohan, M., Sahebkar, A., dan Kesharwani, P., (2022) Recent Update on Application of Propolis as an Adjuvant Natural Medication in Management of Gum Diseases and Drug Delivery Approaches. *Process Biochemistry*. 112: 254–268.
- Przybyłek, I. dan Karpiński, T. M. (2019) Antibacterial Properties of Propolis. *Molecules*. 24(11): 1–17.
- Puspasari, A., Harijanti, K., Soebadi, B., Hendarti, H. T., Radithia, D., dan Ernawati, D. S., (2018) Effects of Topical Application of Propolis Extract on Fibroblast Growth Factor-2 and Fibroblast Expression in the Traumatic Ulcers of Diabetic *Rattus norvegicus*. *Journal of Oral and Maxillofacial Pathology*. 22(1): 54–58.
- Quamilla, N., (2016) Stres dan Kejadian Periodontitis (Kajian Literatur). *Journal of Syiah Kuala Dentistry Society*. 1(2): 161–168.
- Rocco, F., Michele, B., Andrea, T., Nadia, V., dan Patrizio, B., (2020) The Effects of Aloe Vera on Periodontal Health. *European Journal of Molecular & Clinical Medicine*. 7(10): 2865–2870.
- Saputri, D. dan Masulili, S. L. C., (2015) Perawatan Periodontal pada Pasien dengan Periodontitis AGresif (Laporan Kasus). *Cakradonya Dent J*. 7(1): 745–806.
- Sharp, P. dan Villano, J., (2013) *The Laboratory Rat*. 2nd ed. Boca Raton: CRC Press.
- Shastri, S. P., Sanjay, C. J., Kaul, R., Mahima, V. G., dan Doggalli, N., (2015) Topical Drug Delivery: An Essential Aid in the Management of Oral Diseases. *Journal of Advanced Clinical & Research Insights*. 2(6): 269–275.
- Serra, M. B., Barroso, W. A., Silva, N. N., Silva, S. N., Borges, A. C. R., Abreu, I. C., Borges, M. O. R. (2017) From Inflammation to Current and Alternative Therapies Involved in Wound Healing. *International Journal of Inflammation*. 2017: 1–17.
- Singh, P., Rani, B., Maheswari, R., dan Chauhan, A. K., (2011) Diverse Therapeutic Application of *Aloe vera*. *Journal of Advance Scientific Research*. 2(4): 4–11.
- Smith, P. C., Martínez, C., Martínez, J., dan McCulloch, C. A., (2019) Role of Fibroblast Populations in Periodontal Wound Healing and Tissue Remodeling. *Frontiers in Physiology*. 10(270): 1–39.
- Son, H., Jeon, M., Choi, H. J., Lee, H. S., Kim, I. H., Kang, C. M., dan Song, J. S., (2019) Decellularized Human Periodontal Ligament for Periodontium Regeneration. *PLoS ONE*. 14(8): 1–12.
- Sparabombe, S., Riccardo, M., Vincenzo, T., Giulia, O., Andrell, H., Luigi, F., Angelo, P., dan Giovanna, O., (2019) Efficacy of an All-Natural Polyherbal Mouthwash in Patients With Periodontitis: A Single-Blind Randomized Controlled Trial. *Frontiers in Physiology*. 10: 1–7.

- Sukmawati, A. N., Lastianny, S. P., Soesilowati, S. K., dan Suryono, (2020) Carbonated Hydroxyapatite Containing Propolis as an Antibacterial Agent Candidate against *Aggregatibacter actinomycetemcomitans*. *Traditional Medicine Journal*. 25(3): 196–200.
- Sukmawati, Yuliet, dan Hardani, R., (2015) Uji Aktivitas Inflamasi Ekstrak Etanol Daun Pisang Ambon (*Musa Paradisiaca L.*) terhadap Tikus Putih (*Rattus Norvegicus L.*) yang Diinduksi Karagenan. *GALENKA Journal of Pharmacy*. 1(2): 126–132.
- Tamara, A., Oktiani, B. W., dan Taufiqurrahman, I. (2019) Pengaruh Ekstrak Flavonoid Propolis Kelulut (*G. thoracica*) terhadap Jumlah Sel Neutrofil pada Periodontitis (Studi In Vivo Pada Tikus Wistar (*Rattus norvegicus*) Jantan). *Dentin*. 3(1): 10–16.
- Toma, A. I., Fuller, J. M., Willett, N. J., dan Goudy, S. L., (2021) Oral Wound Healing Models and Emerging Regenerative Therapies. *Translational Research*. 236: 17–34.
- Wagh, V. D., (2013) Propolis: A Wonder Bees Product and Its Pharmacological Potentials. *Advances in Pharmacological Sciences*. 2013: 1-12.
- Widyaningrum, N. R., Novitasari, M., dan Puspitasary, K., (2019) Perbedaan Variasi Formula Basis CMC Na Terhadap Sifat Fisik Gel Ekstrak Etanol Kulit Kacang Tanah (*Arachis hypogaea L.*). *Avicenna Journal of Health Research*. 2(2): 121–134.
- Wijaksana, I. K. E., (2019) Periodontal Chart dan Periodontal Risk Assessment sebagai Bahan Evaluasi dan Edukasi Pasien dengan Penyakit Periodontal. *Jurnal Kesehatan Gigi*. 19–25.
- Yu, O. Y., Zhao, I. S., Mei, M. L., Lo, E. C., dan Chu, C. H., (2017) Dental Biofilm and Laboratory Microbial Culture Models for Cariology Research. *Dentistry Journal*. 5(21): 1–12.
- Zheng, W., Wang, S., Wang, J., dan Jin, F., (2015) Periodontitis Promotes the Proliferation and Suppresses the Differentiation Potential of Human Periodontal Ligament Stem Cells. *International Journal of Molecular Medicine*. 36: 915–922.
- Zulhendri, F., Felitti, R., Fearnley, J., Ravalia, M., (2021) The Use of Propolis in Dentistry, Oral Health, and Medicine: A Review. *Journal of Oral Biosciences*. 63(1): 23–34.