

DAFTAR PUSTAKA

- Abdellatif, B., Mohamed, H., Karim, A., dan Asma, B., 2014, Radiography Monitoring of Osteoconduction and Osteoinduction of Orthotopic Allograft Autoclaved Covered with Propolis, *IJALS* 1(1):25-31
- Alhasyimi, A.A., Pudyani, P.S., Asmara, W., dan Ana, I.D., 2018, Effect of carbonated hydroxyapatite incorporated advanced platelet rich fibrin intrasulcular injection on the alkaline phosphatase level during orthodontic relapse, *AIP Conf. Proc.* 1933, 030006
- Al-Molla, B.H., Al-Ghaban, N., dan Taher, A., 2014, Immunohistochemical evaluation: The effects of propolis on osseointegration of dental implants in rabbit's tibia, *J Dent Res Rev* 1:123-31
- Al-Saeed, H.F. dan Mohamed, N.Y., 2015, The Possible Therapeutic Effects of Propolis on Osteoporosis in Diabetic Male Rats, *Nat Sci* 13(3):136-140
- Amaral, R.C., Gomes, R.T., Rocha, W.M.S., Abreu, S.L.R., dan Santos, V.R., 2006, Periodontitis Treatment With Brazilian Green Propolis Gel, *Pharmacologyonline* 3:336-341
- Ana, I.D., Matsuya, S., dan Ishikawa, K., 2010, Engineering of Carbonate Apatite Bone Substitute Based on Composition-Transformation of Gypsum and Calcium Hydroxide, *Sci Res* 2: 344-352
- Ardhani, R., Setyaningsih, Hafiyah, O.A., dan Ana, I.D., 2016, Preparation of Carbonated Apatite Membrane as Metronidazole Delivery System for Periodontal Application, *Key Eng Mater* 696:250-258
- Baker, P.J., 2000, The role of immune responses in bone loss during periodontal disease, *Microbes Infect* 2:1181-1192
- Bashutski, J.D. dan Wang, H., 2009, Periodontal and Endodontic Regeneration, *J Endod* 35:321-328
- Becerik, S., Afacan, B., Ozturk, V.O., Atmaca, H., dan Emingil, G., 2011, Gingival crevicular fluid calprotectin, osteocalcin and cross-linked N-terminal telopeptid levels in health and different periodontal diseases, *Dis Markers* 31: 343-352
- Bellows, C.G., Reimers, S.M., dan Heersche, J.N.M., 1999, Expression of mRNAs for type-I collagen, bone sialoprotein, osteocalcin, and osteopontin at different stages of osteoblastic differentiation and their regulation by 1,25 dihydroxyvitamin D₃, *Cell Tissue Res* 297:249-259

- Boudra, A., Hamdi, M., dan Amara, K., 2014, Role of Propolis in Osteointegration Enhancement in Allograft Autoclaved Implanted in Femur of Dogs, *J Veterinar Sci Technolo* 5(2):1-3
- Caetano-Lopes, J., Canhao, H., dan Fonseca, J.E., 2007, Osteoblasts and Bone Formation, *Acta Reum Port* 32:103-110
- Cekici, A., Kantarci, A., Hasturk, H., dan Dyke, T.E.V., 2014, Inflammatory and immune pathways in the pathogenesis of periodontal disease, *Periodontol* 2000 64(1): 57-80
- Chavan, R.S., Tiwari, I.R., Bhongade, M.L., Jaiswal, P., dan Deo, V.D.S., 2008, Open flap debridement in combination with subepithelial connective tissue graft for the prevention of post-operative gingival recession: a report on a series of cases, *Perio* 5(4): 275-280
- Crea, A., Deli, G., Littarru, C., Lajolo, C., Orgeas, G.V, dan Tatakis, D.N., 2013, Open Flap Debridement With and Without Intramarrow Penetration for Intrabony Defect Theraoy: A Randomized Clinical Trial, *J Periodontol* 85 (1): 34-42
- Crockett, J.C., Rogers, M.J., Coxon, F.P., Hocking, L.J., dan Helfrich, M.H., 2011, Bone remodeling at a Glance, *J. Cell Sci* 124:991-998
- Darmadi, D. dan Mustamsir, E., 2016, The Effect of Propolis on Increasing the Number of Osteoblasts And Chondrocytes, And Decreasing the Number of Osteoclasts in Wistar Rats (*Rattusnovergicus*) with Femoral Bone Fracture, *IOSR-JDMS* 15(12):90-95
- De Mendonca, I.C.G., de Moraes Porto, I.C.C., do Nascimento, T.G., de Souza, N.S., dos Santos Oliveira, J.M., dos Santos Arruda, R.E., Mousinho, K.C., dos Santos, A.F., Basilio-Junior, I.D., Parolia, A., dan Barreto, F.S., 2015, Brazilian Red Propolis: Phytochemical Screening, Antioxidant Activity and Effect Against Cancer Cells, *Bmc Complem Altern M* 15:357
- Elkhatat, E.I., Elkhatat, A.E., Azzeghaiby, S.N., Tarakji, B., Beshr, K., dan Mossa, H., 2015, Clinical and radiographic evaluation of periodontal intrabony defects by open flap surgery alone or in combination with Biocollagen[®] membrane: A randomized clinical trial, *J Int Soc Prev ommunity Dent* (5) 3
- Filho, H.N., Pinto, T.F., Freitas, C.P., Ribeiro-Junior, P.D., dan Santos, P.L., 2014, Autogenous Bone Grafts Contamination After Exposure To The Oral Cavity, *J Craniofac Surg* 25:412-414
- Florencio-Silva, R., Sasso, G.R.D., Sasso-Cerri, E., Simoes, M.J., dan Cerri, P.S., 2015, Review Article: Biology of Bone Tissue: Structure, Function, and Factors That Influence Bone Cells, *Biomed Res Int*:1-17

- Ghasemi, F.S., Eshraghi, S.S., Andalibi, F., Hooshyar, H., Kalantar-Neyestanaki, D., Samadi, A., dan Fatahi-Bafghi, M., 2017, Anti-Bacterial Effect of Propolis Extract in Oil Against Different Bacteria, *J Res Med Sci* 19(3)
- Graziani, F., Gennai, S., Cei, S., Cairo, F., Baggiani, A., Miccoli, M., dan Tonetti, M., 2012, Clinical performance of access flap surgery in the treatment of the intrabony defect. A systematic review and meta-analysis of randomized clinical trials, *J Clin Periodontol* 39: 145-156
- Grenho, L., Barros, J., Ferreira, C., Santos V.R., Monteiro, F.J., Ferraz, M.P., dan Cortes, M.E., 2015, In Vitro Antimicrobial Activity and Biocompatibility of Propolis Containing Nanohydroxyapatite, *Biomed.Mater.* 10
- Groeneveld, E.H.J. dan Burger, E.H., 2000, Bone Morphogenetic Proteins in Human Bone Regeneration, *Eur J Endocrinol* 142: 9-21
- Guessous, F., Huynh, C., N'guyen, H., Godeau, G., Giroud, J.P., Meyer, J., Hornebeck, W., dan Roch-Arveiller, M., 1994, An Animal Model for the Assessment of Gingival Lesions, *J Pharmacol Toxicol Methods* 32(3): 161-7
- Guo, Y., Yao, Y., Guo, Y., dan Ning, C., 2012, Hydrothermal fabrication of mesoporous carbonated hydroxyapatite microspheres for a drug delivery system, *Microporous Mesoporous Mater* 155:245-251
- Gupta, M., Lamba, A.K., Verma, M., Faraz, F., Tandon, S., Chawla, K., dan Koli, D.K., 2013, Comparison of periodontal open flap debridement versus closed debridement with Er, Cr:YSGG laser, *Aust Dent J* 58: 41-49
- Hayakawa, H., Fujinami, K., Ida, A., Furusawa, M., Nikaido, M., Yamashita, S., dan Saito, A., 2012, Clinical outcome of surgical periodontal therapy: A Short-term retrospective Study, *Bull Tokyo Dent Coll* 53(4):189-195
- Hienz, S.A., Paliwal, S., dan Ivanovski, S., 2014, Review Article Mechanisms of Bone Resorption in Periodontitis, *J Immunol Res*
- Ionel, A., Lucaciu, O., Moga, M., Buhatel, D., Ilea, A., Tabaran, F., Catoi, C., Berce, C., Toader, S., dan Campian, R.S., 2015, Periodontal Disesae Induced in Wistar Rats-Experimental Study, *HVM Bioflux* 7(2):90-95
- Itagaki, T., Honma, T., Takahashi, I., Echigo, S., dan Sasano, Y., 2008, Quantitative Analysis and Localization of mRNA Transcripts of Type I Collagen, Osteocalcin, MMP2, MMP8, and MMP13 during Bone Healing in A Rat Calvarial Experimental Defect Model, *Anat.Rec.* 291:1038-1046
- Jebahi, S., Saoudi, M., Badraoui, R., Rebai, T., Oudadesse, H., Ellouz, Z., Keskes, H., Feki, A.E., dan Feki, H.E., 2012, Biologic Response to Carbonated Hydroxyapatite Associated with Orthopedic Device: Experimental Study in A Rabbit Model, *Korean J Pathol* 46: 48-54

- Kaboosaya, B., Wulansari, L.K., Nguyen, T., Aoki, K., dan Kasugai, S., 2017, Ligation Period Required to Induce Periodontitis in Mice: Analysis with Micro-computed Tomography, *J Oral Tissue Engin* 15 (1): 25-34
- Kantarci, A., Hasturk, H., dan Dyke, T.E.V., 2015, Animal models for periodontal regeneration and peri-implant responses, *Periodontol* 2000 68(1): 66-82
- Khurshid, Z., Naseem, M., Zafar, M.S., Najeeb, S., dan Zohaib, S., 2017, Propolis: A Natural Biomaterial For Dental And Oral Health Care, *J Dent Res Dent Clin Prospect* 11(4): 265-274
- Kumar, S., dan Pandey, A.K., 2013, Chemistry and Biological Activities of Flavonoids: An Overview, *Sci. World J*:1-16
- Landi, E., Celotti, G., Logroscino, G., dan Tampieri, A., 2003, Carbonated hydroxyapatite as bone substitute, *J Eur Ceram Soc* 23: 2931-2937
- Landi, E., Martorana, S., Tampieri, A., Guicciardi, S., dan Melandri, C., 2008, Carbonated-Apatite/Gelatine Porous Scaffolds for Bone Replacement, *Key Eng Mater* 361-363: 547-550
- Marsell, R. dan Einhorn, T.A., 2011, The Biology of Fracture Healing, *Injury* 42 (6): 551-555
- Martande, S.S., Kumari, M., Pradeep, A.R., Singh, S.P., dan Suke, D.K, 2017, Comparative evaluation of efficacy of subgingivally delivered 1.2% atorvastatin and 1.2% simvastatin in the Treatment of Intrabony Defects in Chronic Periodontitis: A Randomized Controlled Trial, *J Dent Res Dent Clin Dent Prospect* 11(1):18-25
- Meimandi-Parizi, A., Oryan, A., Syahai, E., dan Bigham-Sadegh, A., 2018, Propolis Extract A New Reinforcement Material in Improving Bone Healing: An In Vivo Study, *Int J Surg* 56: 94-101
- Nakashima, K., dan Cromburghe, B., 2003, Transcriptional mechanisms in osteoblast differentiation and bone formation, *Trends Genet*, 19 (8): 458-466
- Nakashima, K., dan de Crombrughe, B., 2003, Transcriptional mechanisms in osteoblast differentiation and bone formation, *Trends Genet* 19(8): 458-466
- Needleman, I., Tucker, R., Giedrys-Leeper, E., dan Worthington, H., 2005, Guided Tissue Regeneration for Periodontal Intrabony Defects – A Cochrane Systematic Review, *Periodontol* 2000 37: 106-123
- Newman, M.G., Takei, H.H., Klokkevold, P.R., dan Carranza, F.A., 2015, *Carranza's Clinical Periodontology 12th ed.* WB Saunders Co, Philadelphia, h. 52-54

- Nijweide, P.J., Burger, E.H., dan Klein-Nulend, J., 1996, The osteocyte dalam Bilezikian, J.P., Raisz, L.G., dan Rodan, G.A., Principles of bone biology, London UK: Academic Press, 115-126
- Parent, M., Baradri, H., Champion, E., Damia, C., dan Viana-Trecant, M., 2017, Design of calcium phosphate ceramics for drug delivery applications in bone diseases: A review of the parameters affecting the loading and release of the therapeutic substance, *J Con Rel* 252:1-17
- Rathore, B., Singh, M., Kumar, V., dan Misra, A., 2016, Osteocalcin: an Emerging Biomarker for Bone Turnover, *Int J Res Med Sci* 4(9):3670-3674
- Rucci, N., 2008, Molecular biology of bone remodeling, *Clin Cases Miner Bone Metab* 5(1): 49-56
- Sankaranarayanan, R., 2014, Alcohol Use and the development of periodontal disease- a four-year longitudinal study
- Santos, V.R., 2012, Propolis: Alternative Medicine for The Treatment of Oral Microbial Diseases, *Intech* 7
- Saskianti, T., Yuliantanti, W., Ernawati, D.S., Prahasanti, C., dan Suardita, K., 2018, BMP4 Expression Following Stem Cells from Human Exfoliated Deciduous and Carbonate Apatite Transplantation on *Rattus norvegicus*, *JKIMSU* 7(2): 56-61
- Sheweita, S.A., dan Khoshhal, K.I., 2007, Calcium Metabolism and Oxidative Stress in Bone Fractures: Role of Antioxidants, *Curr Drug Metab* 8(5):519-525
- Slotte, C., Asklow, B., Sultan, J., dan Norderyd, O., 2012, A randomized study of Open-flap Surgery of 32 Intrabony Defects with and without adjunct bovine bone mineral treatment, *J Periodontol* 83(8): 999-1007
- Srivastava, A., Bankar, R., dan Roy, P., 2013, Assesment of the role of flavonoids for inducing osteoblast differentiation in isolated bone marrow derived mesenchymal stem cells, *Phytomedicine* 20: 683-690
- Struillou, X., Boutigny, H., Soueidan, A., dan Layrolle, P., 2010, Experimental Animal Models in Periodontology: A Review, *Open Dent J* 4:37-47
- Sukumar, S. dan Drizhal, I., 2008, Review Article: Bone Grafts in Periodontal Therapy, *Acta Medica* 51(4): 203-207
- Suryono, Hasmy, N.S., Pertiwi, T.L., Benyamin, B., Kadir, A.I.A., 2017, Propolis 10%-Gel as A Topical Drug Candidate on Gingivitis, *IJMP*, 5(1):12-17
- Taba, M., Kinney, J., Kim, A.S., dan Giannobile, W.V., 2005, Diagnostic Biomarker for Oral and Periodontal Diseases, *Dent Clin North Am.* 49(3): 551-vi

- Titsinides, S., Agrogiannis, G., dan Karatzas, T., 2018, Bone grafting materials in dentoalveolar reconstruction: a comprehensive review, *Jpn Dent Sci Rev* 15 (1): 26-32
- Toker, H., Ozan, F., Ozer, H., Ozdemir, H., Eren, K., Yeler, H., 2008, A Morphometric and Histopathologic Evaluation of The Effects of Propolis on Alveolar Bone Loss in Experimental Periodontitis in Rats, *J Periodontol* 79(6):1089-1094
- Torre, E., 2017, Molecular signaling mechanisms behind polyphenol-induced bone anabolism, *Phytochem Rev* 16:1183-1226
- Tsiridis, E., Upadhyay, N., dan Giannoudis, P., 2007, Molecular aspects of fracture healing: Which are the important molecules?, *Int J Care Injured* 38 (1): S11-S25
- Ucan, M.C., Koparal, M., Agacayak, S., Gunay, A., Ozgoz, M., Atilgan, S., dan Yaman, F., 2013, Influence of caffeic acid phenethyl ester on bone healing in a rat model, *J Int Med Res* 41(5): 1648-1654
- Weaver, C.M., Alekel, D.L., Ward, W.E., dan Ronis, M.J., 2012, *J Nutr Gerontol Geriatr* 31(3): 239-253
- Zarate, M.S.H., Juarez, M.D.R.A., Garcia, A.C., Lopez, C.O., Chavez, A.J.G., Garfias, J.D.N.S., dan Ramos, F.A., 2018, Flavonoids, phenolic content, and antioxidant activity of propolis from various areas of Guanajuato, Mexico, *Food Sci Technol* 38(2):210-215
- Zenobia, C., Hasturk, H., Nguyen, D., Dyke T.E.V., Kantarci, A., dan Darbeau, R.P., 2014, *Porphyromonas gingivalis* Lipid A Phosphatase Activity Is Critical for Colonization and Increasing the Commensal Load in the Rabbit Ligature Model, *Journals, MBio* 82(2): 650-659
- Zhang, W., Ju, J., Rigney, T., dan Tribble, G., 2014, *Porphyromonas gingivalis* infection increases osteoclastic bone resorption and osteoblastic bone formation in a periodontitis mouse model, *BMC Oral Health* 14(89): 1472-6831
- 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, *Int J Mol Med* 36: 915-922
- Zohery, A.A., Meshri, S.M., Madi, M.I., Rehim, S.S.A.E., dan Nour, Z.M., 2018, Egyptian propolis compared to nanohydroxyapatite graft in treatment of grade II furcation defects in dogs, *J Periodontol* 8