

DAFTAR PUSTAKA

- Ali, M., Anwar, R., Banik, R., Hasan, S., Arefin, M. And Uddin, M., 2019. Mandibular Reconstruction: A Review. *Update Dental College Journal (Updcj)*, 9(2), Pp.50-54.
- Amini, A., Laurencin, C. and Nukavarapu, S., 2013. Bone Tissue Engineering: Recent Advances and Challenges. *Crit Rev Biomed*, 40(5), pp.363-367.
- Baharuddin, N., Kamin, S. and Samsuddin, A., 2005. The Use Of Demineralized Freeze-dried Bovine Bone Xenograft In Reducing Post-surgical Periodontal Recession. *Annals of Dentistry*, 12(1), pp.37-40.
- Baldini N, De Sanctis M, Ferrari M (2011) Deproteinized bovine bone in periodontal and implant surgery. *Dent Mater* 27(1):61–70.
- Benezra Rosen, V., Hobbs, L. and Spector, M., 2002. The ultrastructure of anorganic bovine bone and selected synthetic hydroxyapatites used as bone graft substitute materials. *Biomaterials*, 23(3), pp.921-928.
- Bansal, S., Venkataraman, N., Bansal, P. and Narayan, S., 2015. Dynamics of bone graft healing around implants. *Journal of the International Clinical Dental Research Organization*, 7(3), p.40.
- Carlson, B., Pokorny, J., Schroeder, M. and Sarkaria, J., 2011. Establishment, Maintenance, and In Vitro and In Vivo Applications of Primary Human Glioblastoma Multiforme (GBM) Xenograft Models for Translational Biology Studies and Drug Discovery. *Current Protocols in Pharmacology*, 52(1).
- Chakar, C., Naaman, N., Soffer, E., Cohen, N., El Osta, N., Petite, H. and Anagnostou, F., 2014. Bone Formation with Deproteinized Bovine Bone

- Mineral or Biphasic Calcium Phosphate in the Presence of Autologous Platelet Lysate: Comparative Investigation in Rabbit. *International Journal of Biomaterials*, 2014, pp.1-10.
- Chim, H., Salgado, C., Mardini, S. and Chen, H., 2010. Reconstruction of Mandibular Defects. *Seminars in Plastic Surgery*, 24(2), pp.188-197.
- Chocholata, P., Kulda, V. and Babuska, V., 2019. Fabrication of Scaffolds for Bone-Tissue Regeneration. *Materials*, 12(4), p.568.
- Daneshmandi, L., Shah, S., Jafari, T., Bhattacharjee, M., Momah, D., Saveh-Shemshaki, N., Lo, K. and Laurencin, C., 2020. Emergence of the Stem Cell Secretome in Regenerative Engineering. *Trends in Biotechnology*, 38(12), pp.1373-1384.
- Efremov, L., Kanjevac, T., Ciric, D., Bosnakovski, D. (2014). *Perspectives on Regeneration of Alveolar Bone Defects*. Ser J Exp Clin Res 2013; 14 (4): 145-153 DOI: 10.5937/SJECR5321
- Fernandez de Grado, G., Keller, L., Idoux-Gillet, Y., Wagner, Q., Musset, A., Benkirane-Jessel, N., Bornert, F. and Offner, D., 2018. Bone substitutes: a review of their characteristics, clinical use, and perspectives for large bone defects management. *Journal of Tissue Engineering*, 9, p.204173141877681.
- Ferri J dan Hunziker E 2011. *Preprosthetic and maxillofacial surgery*. Cambridge: Woodhead Publishing Limited, p.257.
- Florencio-Silva, R., Sasso, G., Sasso-Cerri, E., Simões, M. and Cerri, P., 2015. Biology of Bone Tissue: Structure, Function, and Factors That Influence Bone Cells. *BioMed Research International*, 2015, pp.1-17.

- Gardin, C., Ricci, S., Ferroni, L., Guazzo, R., Sbricoli, L., De Benedictis, G., Finotti, L., Isola, M., Bressan, E. and Zavan, B., 2015. Decellularization and Delipidation Protocols of Bovine Bone and Pericardium for Bone Grafting and Guided Bone Regeneration Procedures. *PLOS ONE*, 10(7), p.e0132344.
- Gilbert, S., 2016. *Developmental Biology*. 11th ed. Sinauer Associates, Inc.
- Gilpin, A., Yang, Y. (2017). *Decellularization Strategies for Regenerative Medicine: From Processing Techniques to Applications*. Biomed Res Int 2017:1-13.
- Hallman M and Thor A 2008. Bone substitutes and growth factors as an alternative/complement to autogenous bone for grafting in implant dentistry. *Periodontology 2000*, 47(1), pp.172-192.
- He, Y., Zhang, Z., Zhu, H., Qiu W., Jiang X. and Wei, G. 2007. Experimental study on reconstruction of segmental mandible defects using tissue engineered bone combined bone marrow stromal cells with three-dimensional tricalcium phosphate. *J Craniofac Surg*. 18(4), 800-805.
- Henning, C., Poglia, G., Leie, M. and Galia, C. (2015). *Comparative study of subtalar arthrodesis after calcaneal fracture malunion with autologous bone graft or freeze-dried xenograft*. Journal of Experimental Orthopaedics, 2(1).
- Herford, A., Stoffella, E. and Tandon, R., 2011. Reconstruction of Mandibular Defects Using Bone Morphogenic Protein: Can Growth Factors Replace the Need for Autologous Bone Grafts? A Systematic Review of the Literature. *Plastic Surgery International*, 3698(165824).

- Huhtaniemi, I. and Martini, L. (2018). *Encyclopedia of Endocrine Diseases*. 2nd ed. Academic Press, pp.19-30.
- Humidat, A., Kamadjaja, D., Bianto, C., Rasyida, A. and Harijadi, A., 2018. Effect Of Freeze-Dried Bovine Bone Xenograft On Tumor Necrosis Factor- Alpha Secretion In Human Peripheral Blood Mononuclear Cells. *Asian Jr. of Microbiol. Biotech. Env. Sc.*, 20, pp.S88-S92.
- Jafarian, M., Eslaminejad, M., Khojasteh, A., Mashhadi Abbas, F., Dehghan, M. and Hassanizadeh, R. 2008. Marrow-derived mesenchymal stem cells-directed bone regeneration in the dog mandible: a comparison between biphasic calcium phosphate and natural bone mineral. *Oral Surg Oral Med Oral Pathol Oral RadiolEndod.* 105, e14-e24.
- Jensen, S., Aaboe, M., Janner, S., Saulacic, N., Bornstein, M., Bosshardt, D. and Buser, D., 2013. Influence of Particle Size of Deproteinized Bovine Bone Mineral on New Bone Formation and Implant Stability after Simultaneous Sinus Floor Elevation: A Histomorphometric Study in Minipigs. *Clinical Implant Dentistry and Related Research*, 17(2), pp.274-285.
- Jensen SS, Bornstein MM, Dard M, Bosshardt DD, Buser D (2009) Comparative study of biphasic calcium phosphates with different HA/TCP ratios in mandibular bone defects. A long-term histomorphometric study in minipigs. *J Biomed Mater Res B Appl Biomater* 90B(1):171–181.
- Kakabadze, A., Mardaleishvili, K., Loladze, G., Karalashvili, L., Chutkerashvili, G., Chakhunashvili, D. and Kakabadze, Z., 2017. Reconstruction of mandibular defects with autogenous bone and decellularized bovine bone

grafts with freeze-dried bone marrow stem cell paracrine factors. *Oncology Letters*, 13(3), pp.1811-1818.

Kamadajaja, D., 2018. Tissue Engineering In Maxillofacial Bone Reconstruction. *Journal Of Stem Cell Research And Tissue Engineering*, 1(1).

Kamadajaja, D.B., Purwati, Ferdiansyah and Rantam, F., 2015. Healing Mechanism and Osteogenic Capacity of Bovine Bone Mineral— Human Amniotic Mesenchymal Stem Cell and Autogenous Bone Graft in Critical Size Mandibular Defect. *J. Biomed SciEng.* 8, 733-746. <http://dx.doi.org/10.4236/jbise.2015.810070>

Kamadajaja, D.B, Sumarta, N. and Rizqiawan, A., 2019. Stability of Tissue Augmented with Deproteinized Bovine Bone Mineral Particles Associated with Implant Placement in Anterior Maxilla. *Case Reports in Dentistry*, 2019, pp.1-5.

Kamadajaja, D.B., Triakoso N., Purwati. 2019. Bovine bone xenograft scaffold seeded with human umbilical cord mesenchymal stem cell to reconstruct segmental defect in a dog's mandible (a preliminary study). *Biochemical and Cellular Archieves*, vol.19(2).

Kanitkar, M., Tailor, H. and Khan, W., 2011. The Use of Growth Factors and Mesenchymal Stem Cells in Orthopaedics. *The Open Orthopaedics Journal*, 5(1), pp.271-275.

Katsimbri, P. (2017). *The biology of normal bone remodelling*. *European Journal of Cancer Care*, 26(6), e12740. doi:10.1111/ecc.12740

Kumar L., P., Kandoi, S., Misra, R., S., V., K., R. and Verma, R., 2019. The mesenchymal stem cell secretome: A new paradigm towards cell-free

- therapeutic mode in regenerative medicine. *Cytokine & Growth Factor Reviews*, 46, pp.1-9.
- Kumar, P., Fathima, G. and Vinitha, B. 2013. Bone grafts in dentistry. *Journal of Pharmacy and Bioallied Sciences*, 5(5), p.125.
- Kyriakidou, E., O'Connor, N., Malden, N. and Lopes, V., 2014. Bone defects of the jaws: moving from reconstruction to regeneration. *Dental Update*, 41(7), pp.613-622.
- Laurencin C dan Jiang T 2015. *Bone graft substitutes and bone regenerative engineering*. 2nd ed. U.S.A.: American Academy of Orthopaedic Surgeons, p.223.
- Lee, M., Lee, D., Jeon, J., Tae, G., Shin, Y. and Yang, H., 2020. Biofabrication and application of decellularized bone extracellular matrix for effective bone regeneration. *Journal of Industrial and Engineering Chemistry*, 83, pp.323-332.
- Levi, B., James, A., Nelson, E., Vistnes, D., Wu, B., Lee, M., Gupta, A. and Longaker, M., 2010. Human Adipose Derived Stromal Cells Heal Critical Size Mouse Calvarial Defects. *PLoS ONE*, 5(6), p.e11177.
- Li, H., Pujic, Z., Xiao, Y. and Artold, P., 2000. Identification of Bone Morphogenetic Proteins 2 and 4 in Commercial Demineralized Freeze-dried Bone Allograft Preparations: Pilot Study. *Clinical Implant Dentistry and Related Research*, 2(2), pp.110-117.
- Li, J., Kaplan, D. and Zreiqat, H., 2014. Scaffold-based regeneration of skeletal tissues to meet clinical challenges. *J. Mater. Chem. B*, 2(42), pp.7272-7306.

- Li, Z. and Li, B. 2008. Repair of mandible defect with tissue engineering in rabbits. *ANZ J. Surg.* 75, 1017-1021.
- Lipski, M., Tomaszewska, I., Lipska, W., Lis, G. and Tomaszewski, K., 2013. The mandible and its foramen: anatomy, anthropology, embryology and resulting clinical implications. *Folia Morphologica*, 72(4), pp.285-292.
- Liu, T., Wu, G., Wismeijer, D., Gu, Z. and Liu, Y., 2013. Deproteinized bovine bone functionalized with the slow delivery of BMP-2 for the repair of critical-sized bone defects in sheep. *Bone*, 56(1), pp.110-118.
- Lohan, P., Coleman, C., Murphy, J., Griffin, M., Ritter, T. and Ryan, A., 2014. Changes in immunological profile of allogeneic mesenchymal stem cells after differentiation: should we be concerned?. *Stem Cell Research & Therapy*, 5(4), p.99.
- Mahyudin, F., Utomo, D., Suroto, H., Martanto, T., Edward, M. and Gaol, I., 2017. Comparative Effectiveness of Bone Grafting Using Xenograft Freeze-Dried Cortical Bovine, Allograft Freeze-Dried Cortical New Zealand White Rabbit, Xenograft Hydroxyapatite Bovine, and Xenograft Demineralized Bone Matrix Bovine in Bone Defect of Femoral Diaphysis of White Rabbit: Experimental Study In Vivo. *International Journal of Biomaterials*, 2017, pp.1-9.
- Marion, N. and Mao, J., 2020. Mesenchymal Stem Cells and Tissue Engineering. *Methods in Enzymology*, 420(1), pp.339-361.
- Marolt Presen, D., Traweger, A., Gimona, M. and Redl, H., 2019. Mesenchymal Stromal Cell-Based Bone Regeneration Therapies: From Cell

- Transplantation and Tissue Engineering to Therapeutic Secretomes and Extracellular Vesicles. *Frontiers in Bioengineering and Biotechnology*, 7.
- Marshak, 2008. The osteogenic-angiogenic interface: novel insights into the biology of bone formation and fracture repair. *J Curr Osteoporos.* 67–71.
- Maruotti, N., Corrado, A. and Cantatore, F., 2017. Osteoblast role in osteoarthritis pathogenesis. *Journal of Cellular Physiology*, 232(11), pp.2957-2963.
- Matic, I., Matthews, B.G., Wang, X., Dymant, N.A., Worthley, D.L., Rowe, D.W., Grcevic, D., Kalajzica, I. (2016). Quiescent Bone Lining Cells Are a Major Source of Osteoblasts During Adulthood. *Stem Cells*. 2016 Dec; 34(12): 2930–2942.
- Mauffrey, C., Barlow, B. and Smith, W., 2015. Management of Segmental Bone Defects. *Journal of the American Academy of Orthopaedic Surgeons*, 23(3), pp.143-153.
- Nauth, A., Schemitsch, E., Norris, B., Nollin, Z. and Watson, J., 2018. Critical-Size Bone Defects: Is There a Consensus for Diagnosis and Treatment?. *J Orthop Trauma*, 32(3), pp.7-11.
- Ngoc N 2012. Basic Knowledge of Bone Grafting. *Bone Grafting*. p.11
- Oliveira, M., Rocha, F., Batista, J., de Moraes, S. and Barbosa, D., 2013. Reconstruction of Mandibular Defects. *A Textbook of Advanced Oral and Maxillofacial Surgery*, p.63.
- Ong J dan Guda T 2016. *Translating Biomaterials for Bone Graft: Bench-top to Clinical*. 2nd ed. CRC Press, p.4.

- Oryan, A., Alidadi, S. and Moshiri, A., 2013. Current concerns regarding healing of bone defects. *Hard Tissue*, 2(2).
- Oryan, A., Alidadi, S., Moshiri, A. and Maffulli, N., 2014. Bone regenerative medicine: classic options, novel strategies, and future directions. *Journal of Orthopaedic Surgery and Research*, 9(1), p.18.
- Paré, A., Bossard, A., Laure, B., Weiss, P., Gauthier, O. and Corre, P., 2019. Reconstruction of segmental mandibular defects: Current procedures and perspectives. *Laryngoscope Investig Otolaryngol*, 4(6), pp.587-596.
- Pappachan, B. and Alexander, M., 2012. Biomechanics of Cranio-Maxillofacial Trauma. *Journal of Maxillofacial and Oral Surgery*, 11(2), pp.224-230.
- Parisi, L., Buser, D., Chappuis, V. and Asparuhova, M., 2020. Cellular responses to deproteinized bovine bone mineral biofunctionalized with bone-conditioned medium. *Clinical Oral Investigations*,.
- Park, J., Lee, K., Lee, W., Kim, H., Lee, K. and Kim, I., 2013. Establishment of the chronic bone defect model in experimental model mandible and evaluation of the efficacy of the mesenchymal stem cells in enhancing bone regeneration. *Tissue Engineering and Regenerative Medicine*, 10(1), pp.18-24.
- Ratner, B., Schoen, F., Hoffman, A., Lemons, J. (2013). *Biomaterials Science. An Introduction to Materials In Medicine*. 3rd ed. Academic Press. <https://doi.org/10.1016/C2009-0-02433-7>, pp.1194-1214.
- Rosenbaum, A., Grande, D. and Dines, J., 2008. The use of mesenchymal stem cells in tissue engineering. *organogenesis*, 4(1), pp.23-27.

- Roddy, E., DeBaun, M., Daoud-Gray, A., Yang, Y. and Gardner, M., 2017. Treatment of critical-sized bone defects: clinical and tissue engineering perspectives. *European Journal of Orthopaedic Surgery & Traumatology*, 28(3), pp.351-362.
- Sari, D., Maduratna, E., Latief, F., Nugraha, A., Sudiana, K. and Rantam, F., 2019. Osteogenic Differentiation and Biocompatibility of Bovine Teeth Scaffold with Rat Adipose-derived Mesenchymal Stem Cells. *European Journal of Dentistry*, 13(02), pp.206-212.
- Scabbia, A. and Trombelli, L. 2004. A Comparative Study On The Use of A HA/ Collagen/ Chondroitin Sulphate Biomaterial (Biostite) and A Bovine-Derived HA Xenograft(Bio-Oss) In The Treatment Of Deep Intra- Osseous Defects. *J Clin Periodontol*. 31 : 348-355.
- Sihombing, I., Wangko, S., Kalangi, S.J.R. (2012). Peran Estrogen pada Remodeling Tulang. *Jurnal Biomedik*, Volume 4, Nomor 3, Suplemen, November 2012, hlm. S18-28
- Sharma, P., Kumar, P., Sharma, R., Bhatt, V. and Dhot, P., 2019. Tissue Engineering; Current Status & Futuristic Scope. *Journal of Medicine and Life*, 12(3), pp.225-229.
- Sheikh, Z., Hamdan, N., Ikeda, Y., Gryn timer, M., Ganss, B. and Glogauer, M. (2017). *Natural graft tissues and synthetic biomaterials for periodontal and alveolar bone reconstructive applications: a review*. *Biomaterials Research*, 21(1).

- Siddiqui, J. and Partridge, N. (2016). *Physiological Bone Remodeling: Systemic Regulation and Growth Factor Involvement*. *Physiology*, 31(3), pp.233- 245.
- Stern, A. and Barzani, G., 2015. Autogenous Bone Harvest for Implant Reconstruction. *Dental Clinics of North America*, 59(2), pp.409-420.
- T., Albrektsson and C., Johansson, 2001. Osteoinduction, osteoconduction and osseointegration. *European Spine Journal*, 10(0), pp.S96-S101.
- Taufik A, Zuhan A, Kusdaryono S, dan Rohadi R 2017. Karakterisasi Hydroxyapatite Alami yang Dibuat dari Tulang Sapi dan Cangkang Telur sebagai Bahan untuk Donor Tulang (Bone Graft). 9-13.
- T. Brown, P., M. Handorf, A., Bae Jeon, W. and Li, W., 2013. Stem Cell-based Tissue Engineering Approaches for Musculoskeletal Regeneration. *Current Pharmaceutical Design*, 19(19), pp.3429-3445.
- Tollemar, V., Collier, Z., Mohammed, M., Lee, M., Ameer, G. and Reid, R., 2016. Stem cells, growth factors and scaffolds in craniofacial regenerative medicine. *Genes and Diseases* 5. 3, 1, pp.56-71.
- Tran, N., Nguyen, D., Luong, T., Bui, N., Toi, V. and Nguyen, T., 2020. Decellularization of Bovine Cancellous Bone for Bone Tissue Engineering Application. *Springer Nature Singapore*, pp.139-142.
- Uzbek, U., Rahman, S., Alam, M. and Gillani, S., 2014. Bone Forming Potential of An-Organic Bovine Bone Graft: A Cone Beam CT study. *JOURNAL OF CLINICAL AND DIAGNOSTIC RESEARCH*, 8(12).
- Vitria, E. and Latif, B., 2010. Tissue engineered bone as an alternative for repairing bone defects. *Dental Journal (Majalah Kedokteran Gigi)*, 43(1), p.11.

- Wahl D dan Czernuszka J 2006. Collagen-Hydroxyapatite Composites for Hard Tissue Repair. *European Cells and Materials*, 11, pp.43-56.
- Wahyuningtyas, E., Hsu, L., Lan, W., Wen, S., Ou, K., Chou, H., Huang, M. and Sugiatno, E., 2019. Application of a Promising Bone Graft Substitute in Bone Tissue Regeneration: Characterization, Biocompatibility, and In Vivo Animal Study. *BioMed Research International*, 2019, pp.1-7.
- Walsh JS 2017. Normal bone physiology, remodeling and its hormonal regulation, Surgery.
- Wardana, Wisnu Murthy. 2015. Uji Toksisitas Freeze-Dried Bovine Bone terhadap Human Bone Marrow Derived Mesenchymal Stem Cell. Karya Tulis Akhir, pp.39.
- Wu, G., Hunziker, E., Zheng, Y., Wismeijer, D. and Liu, Y., 2011. Functionalization of deproteinized bovine bone with a coating-incorporated depot of BMP-2 renders the material efficiently osteoinductive and suppresses foreign-body reactivity. *Bone*, 49(6), pp.1323-1330.
- Wubneh, A., Tsekoura, E., Ayranci, C., Uludağ., H. (2018). Review Article: Current State of Fabrication Technologies and Materials for Bone Tissue Engineering, *Acta Biomaterialia* (2018), doi: <https://doi.org/10.1016/j.actbio.2018.09.031>.
- Yorio, T., Clark, A. and Wax, M., 2011. *Ocular Therapeutics*. pp.87-116.
- You, L., Weikang, X., Lifeng, Y., Changyan, L., Yongliang, L., Xiaohui, W. and Bin, X., 2018. In vivo immunogenicity of bovine bone removed by a novel

decellularization protocol based on supercritical carbon dioxide. *Artificial Cells, Nanomedicine, and Biotechnology*, 46(sup2), pp.334-344.

Yuan, J., Cui, L., Zhang W., Liu W., and Cao Y. 2007. Repair of canine mandibular bone defects with bone marrow stromal cells and porous beta tricalcium phosphate. *Biomaterials* 28, 1005-1013.

Zhao, C., Tan, A., Pastorin, G. and Ho, H., 2013. Nanomaterial scaffolds for stem cell proliferation and differentiation in tissue engineering. *Biotechnology Advances*, 31(5), pp.654-668.

Zhao, H., Wu, J., Zhu, J., Xiao, Z., He, C., Shi, H., Li, X., Yang, S. and Xiao, J., 2015. Research Advances in Tissue Engineering Materials for Sustained Release of Growth Factors. *BioMed Research International*, 2015, pp.1-7.