

## DAFTAR PUSTAKA

- Agustina, Eva and Fariani Syahrul. 2017. The Effect of Operating Procedure with Infection Incidence on Contaminated Cleaning Operating Patients (Case Control Study in RSU HAJI Surabaya). *Jurnal Berkala Epidemiologi*, Vol. 5, pp. 351-360.
- ATSDR. 2017. *Toxicological Profile for Glutaraldehyde* pp. 136. Georgia: U.S. Department of Health and Human Services.
- Axford, John S. 2010. Joint and bone infections. *Medicine*, Vol. 38, No. 4, pp. 194-201.
- Azam, Q., MKA, Sherwani, Mazhar A., Rahul, G., Naiyer, A., and AB, Sabir. 2007. Internal Fixation in Compound Type III Fractures Presenting After Golden Period. *Indian Journal of Orthopaedics*, Vol. 41, No. 3, pp. 204-207.
- Azi, M. L., Maurico K. J., Roberto M., & Cleber A. J. P. 2010. Bone Cement and Gentamicin in The Treatment of Bone Infection: Background and In Vitro Study. *Acta Ortop Bras*, Vol. 18, No. 1, pp. 31-34.
- Barret, Kim E., Heddwen B., Scott B., and Susan, Barman. 2010. *Ganong's Review of Medical Physiology Twenty-Third Edition* pp. 371. Chicago: The McGraw-Hill Companies, Inc.
- Budiatin, Aniek Setiya. 2014. *Pengaruh Glutaraldehid sebagai Cross-link Agent Gentamisin dengan Gelatin terhadap Peningkatan Efektifitas Bovine Hydroxyapatite-Gelatin sebagai Sistem Penghantaran Obat dan Pengisi Tulang* pp. 97-98. Fakultas Sains dan Tehnologi Universitas Airlangga.
- Budiatin, Aniek Setiya., Muhammad Zainuddin and Junaidi Khotib. 2014. Biocompatible Composite as Gentamicin Delivery System for Osteomyelitis and Bone Regeneration. *International Journal of Pharmacy and Pharmaceutical Sciences* Vol. 6 No. 3, p. 223-226.

- Buteera A. M and J. Byimana. 2009. Principles of Management of Open Fractures. *East and Central African Journal of Surgery* Vol. 14 No. 2, p. 2-8.
- Butini, M. E. 2017. In vitro anti-biofilm activity of a biphasic gentamicin-loaded calcium sulfate/hydroxyapatite bone graft substitute. *Colloids and Surfaces B: Biointerfaces* Vol. 161, p. 252–260.
- Cardiff, Robert D., Claramae H. Miller and Robert J. Munn. 2014. Cold Spring Harbor Protocols: Manual Hematoxylin and Eosin Staining of Mouse Tissue Sections pp. 655-658. California: Cold Spring Harbor Laboratory Press.
- Carver D. C., Sean B. K., and John C. Weinlein. 2017. Role of Systemic and Local Antibiotik in the Treatment of Open racture. *Journal of Orthopaedic Clinical N Am*, Vol. 48, pp. 137-153.
- Chang, Y., C-L. Tai, P-H. Hsieh, and S. W. N. Ueng. 2013. Gentamicin in bone cement: A Potentially More Effective Prophylactic Measure Of Infection In Joint Arthroplasty. *Bone Joint Res* Vol. 2 No. 10, p. 220-226.
- Clarke, Bart. 2008. Normal Bone Anatomy and Physiology. *Clin J Am Soc Nephrol* Vol. 3, pp. S131–S139.
- Costa, P. M. 2018. Chapter 4: Staining Protocols In P. M. Costa (Eds). *The Handbook of Histopathological Practices in Aquatic Environments* pp. 83. Elsevier Inc.
- Crowder, C.M., Janna. M. Andronowski, and Victoria M. Dominguez. 2018. Chapter 18: Bone Hystology as an Intregrated tool in The Process of Human Identification. In C.M Crowder, C.M., Janna. M. Andronowski, & Victoria M. Dominguez (Eds). *New Prespective in Forensic Human Skeletal Identification*. United States: Elsevier. p. 201-213.
- Departemen Kesehatan RI. 2014. *Farmakope Indonesia Edisi V* pp. 478. Jakarta: Departemen Kesehatan Republik Indonesia.

- Dhaliwal, Kiran and Priya, Dosanjh. 2018. Biodegradable Polymers and their Role in Drug Delivery Systems. *Biomed Journal of Scientific & Technical Research* Vol. 11, No. 1, pp. 8315-8319.
- Einhorn, Thomas A., and Louis C. Gerstenfeld. 2014. Fracture healing: Mechanisms and interventions. *Nature Reviews Rheumatology*, Vol. 11 No.1, p. 45-54.
- El-Rashidy, A. A., Judith A. Roether, Leila H., Ulrich K., and Aldo R. Boccaccini. 2017. Regenerating Bone with Bioactive Glass Scaffolds: A Review of In Vivo Studies in Bone Defect Models. *Acta Biomaterialia*. pp. 2
- Eroschenko, Victor. P., 2012. *diFIORE's: Atlas of Hystology with Functional Correlations 12<sup>th</sup>ed* pp. 133. Philadelphia: Wolters kluwer.
- Fassbender, M., S. Minkwitz., Z. Kronbach, C. Strobel, A. Kadow-Romacker, G. Schmidmaier, and B. Wildemann. 2013. Local Gentamicin Application Does Not Interfere With Bone Healing in a Rat Model. *Journal of Bone* Vol. 55, No. 2013, pp. 298-304.
- Farris, Steffano, Jianhui Song and Qingrong Huang. 2010. Alternative Reaction Mechanism for the Cross-Linking of Gelatin with Glutaraldehyde. *J. Agric. Food Chem* Vol. 58 No. 2, p. 998-1003.
- Furuike, T., Thitirat C., Tsubasa O., Takahiro M., and Hiroshi, Tamura. 2016. Fabrication of Nonwoven Fabrics Consisting of Gelatin Nanofibers cross-linked by Glutaraldehyde or N-acetyl-d-Glucosamine by Aqueous Method. *Biological Macromolecules* Vol. 93, p. 1530-1538.
- Ginalska, Grażyna, Dorota Kowalczyk and Monika Osińska. 2005. A Chemical Method of Gentamicin Bonding to Gelatine-Sealed Prosthetic Vascular Grafts. *International Journal of Pharmaceutics* Vol. 288, p. 131-140.

- GMIA. 2012. *Gelatin Manufacturers Institute of America* pp. 5. Amerika: GMIA.
- Gomes, Diana., Margarida Pereira., and Ana Francisca Bettencourt. 2013. Osteomyelitis: an Overview of Antimicrobial Therapy. *Brazilian Journal of Pharmaceutical Sciences* Vol. 49 No. 1, p. 13-27.
- Gosau, M., and B. W. Müller. 2010. Release of gentamicin sulphate from biodegradable PLGA-implants produced by hot melt extrusion. *Pharmazie* Vol. 65, p. 487-492.
- Halawi, M. J., and Michael, P. Morwood, MD. 2015. Acute Management of Open Fractures: An Evidence-Based Review. Vol. 38, No. 11, pp. e1025-e1031.
- Horkavcova, D., Dana R., Lenka K., Klara Z., Zuzana Z. C., and Ales, Helebrant . 2014. Comparison Of Reactivity Of Synthetic And Bovine Hydroxyapatite In Vitro Under Dynamic Conditions. *Ceramics – Silikáty* Vol. 58 No. 1, p. 70-78.
- Hung, Nguyen Ngoc. 2012. Basic Knowledge of Bone Grafting. *Bone Grafting*. pp. 11-33.
- Ince, Akif., Norbert, A., Nadja, K., Jochen, F. L., and Jochen, Eulert. 2007. Gentamicin Negatively Influenced Osteogenic Function In Vitro. *International Orthopaedics (SICOT)* Vol. 2007, No. 31, pp. 223-228.
- Kartikasari, Cahyaning D. 2017. “**Uji Efektivitas Pemberian Pelet Alendronat pada Defek Tulang Akibat Fraktur karena Osteoporosis**” hal. 61. Fakultas Farmasi Universitas Airlangga. Surabaya.
- Katzung, Betram G., Susan B. M., and Anthony J. T. 2012. *Basic and Clinical Pharmacology 12<sup>th</sup> ed* pp. 825. United States: The McGraw-Hill Companies, Inc
- Khoo, W. F. M. Nor, H. Ardhyanta, and D. Kurniawan. 2015. Preparation of Natural Hydroxyapatite from Bovine Femur Bones Using Calcination at Various Temperatures. *Procedia Manufacturing* Vol. 2, p. 196-201.

- Kluin, Otto S., Henny C. Van der Mei, Henk J. B., and Danielle, Neut. 2012. Biodegradable vs Nonbiodegradable Antibiotic Delivery Devices in The Treatment of Osteomyelitis. *Expert Opinion on Drug Delivery* pp. 1-7. UK: Rights Link.
- Kock, Hans-Jurgen, Dirk. E., Frank, J., and Werner, F. 2013. In-vitro Analysis of The Effect of Gentamicin and Polyhexanide on Bone Tissue. *Journal of International Orthopaedics* Vol. 37 No. 2013 pp. 761-767.
- Kohli, N., Sonia Ho, Stuart J. B., Prasad S., Vaibhav S., Martyn S., and Elena, Garcia-Gareta. 2018. Bone remodelling in vitro: Where are we headed? -A review on The Current Understanding of Physiological Bone Remodelling and Inflammation and the Strategies for Testing Biomaterials In Vitro. *Bone* Vol. 110 p. 38-46.
- Krol, Zaneta. 2016. Characteristic of Gelatine, Carrageenan and Sodium Alginate Hydrosols Treated by Direct Electric Current. *Polymers* Vol. 8 No. 8, p. 275-294.
- Kondo, N., Akira, O., Kunihiko, T., Tomoyuli, I., Kutsumisu, A., Naoko, K., Hikaru, I., Hiroyuki, I., and Naoto, Endo. 2005. Bone Formation and Resorption of Highly Purified  $\beta$ -tricalcium phosphate in the Rat Femoral Condyle. *Journal of Biomaterials*, Vol. 26, pp. 5600-5608.
- Leung, Andraay H.C., Benjamin R. Hawthorn & A. Hamish R.W. Simpson. 2015. The Effectiveness of Local Antibiotics in Treating Chronic Osteomyelitis in a Cohort of 50 Patients with an Average of 4 Years Follow-Up. *The Open Orthopaedics Journal* Vol. 9, p. 372-378.
- Li, Guo-qing, Fang-fang, Guo MS., Yang, Ou MS., Guang-wei, Dong MS., & Wen, Zhou MS. 2013. Epidemiology and Outcomes of Surgical Site Infections Following Orthopedic Surgery. *American Journal of Infection Control* Vol. 41, p. 1268-1271.
- Liu, Y., Peihong Ji, Huilin Lv, Yong Q., and Linhong, Deng. 2017. Gentamicin modified chitosan film with improved antibacterial property and cell biocompatibility. *Biological Macromolecules* Vol. 98, p. 550-556.

- Loi, F., Luis A. C., Jukka P., Tzu-hua L., Zhenyu Y., and Stuart B. Goodman. 2016. Inflammation, Fracture and Bone Repair. *Bone* Vol. 86, p. 119-130.
- Lucke M., G. Schmidmaier, S. Sadoni, B. Widemann, R. Schiller, N.P. Haas, and M. Raschke. 2003. Gentamicin Coating of Metallic Implants Reduces Implant-Related Osteomyelitis in Rats. *Journal of Bone* Vol. 32, No. 2003, pp. 521-531.
- Mariod, A. Adam and Hadia Fadol Adam. 2015. Review: Gelatin, Source, Extraction and Industrial Applications. *Acta Sci. Pol., Technol. Aliment* Vol. 12 No. 2, p. 135-147.
- Marsell, Richard and Thomas A. Einhorn. 2011. The Biology of Fracture Healing. *Injury*. Vol. 42, p. 551-555.
- Meruvia-Pastor, Oscar E., Jung, Soh, Eric, J. S., Julia, C. B., Mei, Xiao, Heather, A. J., Benedikt, H., and Cristoph, W. S. 2011. Estimating Cell Count and Distribution in Labeled Histological Samples Using Incremental Cell Search. *International Journal of Biomedical Imaging*, Vol. 2011, pp. 1-16.
- Noorisa, R., Dwi A., Abdul A., and Sulis, Bayusentono. 2017. The Characteristic Of Patients With Femoral Fracture In Department Of Orthopaedic And Traumatology Rsud Dr. Soetomo Surabaya 2013 – 2016. *Journal of Orthopaedi & Traumatology Surabaya* Vol. 6 No. 1, p. 1-11.
- Nyary, Tamas., and Brigitte E Scammell. 2017. Principles of Bone and Joint Injuries and Their Healing. *Surgery* Vol. 36 No.1.
- Oryan, Ahmad., Somayeh Monazzah., and Amin Bigham-Sadegh. 2015. Bone Injury and Fracture Healing Biology. *Biomedical and Environmental Sciences*, Vol. 28 No.1, p. 57-71.
- Pilge H., Julia F., Sabine, Lensing-Hohn, Cristoph Z., and Rudiger, Krauspe. 2016. Cefazolin Irreversibly Inhibits Proliferation and Migration of Human Mesenchymal Stromal Cells. *BioMed Research International* Vol. 2016, pp. 1-6.

- Povoroznyuk, V., Ninel D., and Andrii M. 2014. Effect of Aging on Fracture Healing. *Journal of Gerontologija* Vol. 15, No. 2, pp. 97-102.
- Ralston, Stuart H. 2017. Bone Structure and Metabolism. *Medicine* Vol. 45 No. 9.
- Rathbone, C.R., Jessica, D.C., Kate V. B., Clinton, K.M., and Joseph, C W. 2011. Effect of Various Concentrations of Antibiotics on Osteogenic Cell Viability and Activity. *Journal of Orthopaedic Research* Vol. 29, pp. 1070-1074.
- Renstch, C., Wolfgang S., Suzanne M., Barbe R., and Stefan, Rammelt. 2014. Comprehensive histological evaluation of bone implants. *Biomatter* Vol. 4, pp. 1-10.
- Rincon-Lopez, J. A., Jennifer A. HM., Astrid L. GB., Andrea De VR., Juan M. AO., and Juan, Muncoz-Saldana. 2018. Synthesis, Characterization and In Vitro Study of Synthetic and Bovine-Derived Hydroxyapatite Ceramics: A Comparison. *Materials* Vol. 11, p. 333-350.
- Rowe, S. C., Paul J. S., and Marian E. Q. Eds. 2009. *Handbook of Pharmaceutical Excipients 6th ed* pp. 278-281. USA: Pharmaceutical Press and American Pharmacists Association.
- Saltzman, W. Mark. 2001. *Drug Delivery: EGINEERING PRINCIPLES FOR DRUG THERAPY* pp. 266. New York: Oxford University Press.
- Shirazi, H. Asgharzadeh., M.R. Ayatollahi and B. Beigzadeh. 2016. Preparation and characterisation of hydroxyapatite derived from natural bovine bone and PMMA/BHA composite for biomedical applications. *Materials Technology* Vol. 38 No.8, pp. 448-453.
- Sya'ban S. N., Widati F., and Sulis, Bayusentono. 2017. The Profile of Fracture in Patients Under 17 Years of Age at RSUD DR. Soetomo in the Period of 2013-2014. *Journal of Orthopaedi & Traumatology Surabaya* Vol. 6, No. 1, pp. 21-30.

- Sweetman, Sean C. 2009. *Martindale The Complete Reference 36<sup>th</sup>ed* pp. 282. London: Pharmaceutical Press.
- Thitiyanaporn, C., Pareeya, U., and Naris, T. 2013. Comparison of Gentamicin Impregnated Poymethylnmetacrylate Bead, Gentamicin Coated Native Calcium Sulfate Bead and Gentamicin Coated High Porous Calcium Sulfate Bead on Osteomyelitis Management in a Rat Model. *Tahi J Vet Med*, Vol. 43, No. 3, pp. 397-404.
- Thomas, M. V., and D. A. Puleo. 2011. Infection, Inflammation, and Bone Regeneration: a Paradoxical Relationship. *J Dent Res* Vol. 90 No. 9, p. 1052-1061.
- Titsinides, S., G. Agrogiannis, and T. Karatza. 2018. Bone Grafting Materials in Dentoalveolar Reconstruction: A Comprehensive Review. *Japanese Dental Science Review* Vol. 55, No. 1, pp. 26-32.
- Tjandra, Ryan R. 2017. *Korelasi Ekspresi Alkaline Phosphatase dengan Jumlah Osteoblas pada Pergerakan Gigi* p. 25-26. Fakultas kedokteran Gigi Universitas Airlangga.
- Walsh, Jennifer S. 2017. Normal Bone Physiology, Remodelling and its Hormonal Regulation. *Surgery* Vol. 36, No. 1, pp. 1-6.
- Wang, Wenhao., Kelvin W.K. Yeung. 2017. Bone Grafts and Biomaterials Substitutes for Bone Defect Repair: A review. *Bioactive Material* Vol. 2, p. 224-247.
- Whiteing, NL. 2008. Fractures: Pathophysiology, Treatment and Nursing Care. *Nursing Standart* Vol. 23 No. 2, p. 49-57.
- Yang, Yang, Alastair Campbell Ritchie and Nicola M. Everitt. 2017. Comparison of Glutaraldehyde and Procyanidin Cross-linked Scaffolds for Soft Tissue Engineering. *Materials Science and Engineering C* Vol. 80, p. 263–273.
- Yoruc, A. B. H., A. Karakas, A. Koyun and T. Yildiz. 2012. Comparison of Properties of Hydroxyapatite Powders Synthesized by Chemical and Biomimetic Techniques. *ACTA PHYSICA POLONICA A* Vol. 121 No.1, p. 233-235.



- Yousif, Mustafa Q., and Shadi A. Qasem. 2016. Chapter 3: Tissue Processing and Staining for Histological Analyses In Yousif, Mustafa Q., and Shadi A. Qasem (Eds). *Skin Tissue Engineering and Regenerative Medicine* pp. 49-52. USA: Elsevier Inc.
- Yu, hedong., *et al.* 2018. Exogenous VEGF Introduced by Bioceramic Composite Materials Promotes The Restoration of Bone Defect in Rabbits. *Biomedicine & Pharmacotherapy* Vol. 98, p. 325-332.