

DAFTAR PUSTAKA

- Abdollahi, M., Shin Yi, T., Rezaeizadeh, A., Aamidor, S., Twigg, S. M., Min, D., McLennan, S. V., 2016, Insulin Treatment Prevents Wounding Associated Changes in Tissue and Circulating Neutrophil MMP-9 and NGAL in Diabetic Rats, *Plos ONE*: 12(2)
- Acosta, Sculttz, G. S., Moa, E. L., Nieto, G. G., Sivero, M. G., Maertinez, L. H., 2013, Glucose Toxic Effect on Granulation Tissue Productive Cells: The Diabetics impaired Healing, *Biomed Research International*, Hindawi Publishing Corporation.
- Antonini, D., Sibilio, A., Dentice, M., Missero, C., 2013, An Intimate Relationship between Thyroid Hormone and Skin: Regulation of Gene Expression, *Frontier in endocrinology vol 4*.
- Bag, S., Conjeti, S., Das, R. K., Pal, M., Paul, R. R., 2013, Computational Analysis of p63+ Nuclei Distribution Pattern by Graph Theoretic Approach in an Oral Pre-Cancer (Sub-mucous fibrosis), *J Pathol Inform* 3 :4-35
- Blakytyn, R., Jude, E., 2006, The Molecular Biology of Chronic Wounds and Delayed Healing in Diabetes. *Diabet. Med.* 23: 594–608.
- Borregard, N., 2010, Neutrophil, from Marrow to Microbes, *Immunity*, 33(5):657-670.
- Brunicardi, F. C., Andersen, D. K., Billiar, T. R., Dunn, D. L., Hunter, J. G., Matthews, J. B., Pollock, R. E., 2015, *Schwartz's Principles of Surgery, 10th Ed.*, The McGraw-Hill Companies, Inc., pp. 23, 219-260.
- Cameron, T. P., Lattuada, C. P., Kornreich, M. R., Tarone R. E., 1982, Longevity and Reproductive zcomparisons for Male ACI and Sprague-Dawley Rat Aging Colonies, *Laboratory Animal Science*, 32(5):495-9.
- Chan, Y. S., Hsu, K. Y., Kuo, C. H., Lee, S. D., Chen, S. C., Chen, W. J., Ueng, S. W., 2010, Using Low Intensity Pulsed Ultrasound to Improve Muscle Healing after Laceration Injury: An In Vitro and In Vivo Study, *Ultrasound Med Biol* 36: 743-751.
- Damasceno, D. C., Netto, A. O., Iessi, I. L., Gallego, F. Q., Corvino, S. B., Dallqua, B., Sinzato, Y. K., Bueno. A., Calderon, I. M. P., Rudgel M. V. C., 2014, Streptozotocin –Induced Diabetes Models: Pathophysiological Mechanism and Fetal Outcomes. *Biomedical Research Internasional Volume 2014*, Article ID 819065.

- Da Silva Junior, E.M., Mesquita-Ferrari, R. A., Franca, C. M., Andreo, L., Bussadori, S. K., Fernandes, K. P. S., 2017, Modulating Effect of Low Intensity Pulsed Ultrasound on the Phenotype of Inflammatory Cells, *Elsevier : J. Biomedicine & Pharmacotherapy* 89.
- Daniels, R., Nicoll, L. H., 2012, *Contemporary Medical-Surgical Nursing, 2nded.*, Delmar Cengage Learning, pp.229-236.
- Davis, P., 2008, The Immunology of Wound Healing: The Body as a Battlefield. *Wounds UK* 4(4) 54-69.
- Deeds, M. C., Anderson, J. M., Armstrong, A. S., Gastineau, D. A., Hiddinga, H. J., Jahangir, A., Eberhardt, N. L., Kudva, Y. C., 2011, Single Dose Streptozotocin Induced Diabetes: Consideration for Study Design in Islet transplantation Models. *Laboratory animal*. 45(3): 131-140.
- Dinh, T., Elder, S., Veves, A., Delayed Wound Healing in Diabetes: Considering Future Treatments, 2011, *Diabetes Manage*1(5), 509–519.
- Dorsett-Martin, W. A., Wysocki, A. B., 2008, Sourcebook of Models for Biomedical Research, *PM Conn Ed. Humana Press Inc*, Totowa, NJ. pp. 631-637.
- Dovi, J. V., Szpaderska, A. M., DiPietro L. A., 2004, Neutrophil Function in The Healing Wound : Adding Insult to Injury?, *Thromb Haemost* 92: 275-80.
- Edmonds, M., Foster, A. V. M., 2005, ABC of Wound Healing : Diabetic foot ulcers. *British Medical Journal* 332: 407-410.
- Falanga, V., 2005, Wound healing and its impairment in the diabetic foot. *Lancet* 366(9498):1736– 1743.
- Federer, W. T., 1955, Experimental Design : Theory and Application, *The Macmillan Company*, pp.114-134.
- Gebauer, G. P., Lin, S. S., Beam, H. A., Vieira, P., Russell-Parsons, J., 2002, Low Intensity Pulse Ultrasound Increases the Fracture Callus Strength in Diabetic Wistar Rats but Does Not Affect Cellular Proliferation. *Fourrid of Ortlzopaeiic Resserich* 20 :587-592.
- Guo, S., DiPietro, L. A., 2010, Factors Affecting Wound Healing, *J Dent Res*, 89(3): 219-229.
- Harrison, A., Lin, S., Pounder N., Takagaki Y. M., Hayek, S. N., 2016, Mode & Mechanism of Low Intensity Pulsed Ultrasound (LIPUS) in Fracture Repair, *Int. Ultrasonics J*, 70: 45-52.

- Hasan, M. A., Campbell, P., Kondo, T., 2010, The Role of Ca^{2+} in Ultrasound Elicited Bioeffect : progress, perspective and prospect, *Drug Discovery today*, 15: 1-7.
- Hill, G. E., Fenwick, S., Matthews, B. J., Chivers, R. A., Southgate, J., 2005, The Effect of Low-Intensity Pulsed Ultrasound on Repair of; 31(12): 1701-6.
- Hupp, J. R., Ellis, E., Tucker, M. R., 2014, *Contemporary oral and maxillofacial surgery*. 6th ed., Elsevier, pp: 43-52.
- Iwanabe, Y., Masaki, C., Tamura, A., Tsuka, S., Mukaibo, T., Kondo, Y., Hosokawa, R., 2016, The effect of low-intensity pulsed ultrasound on wound healing using scratch assay in epithelial cells. *Journal of Prosthodontic Research*, 60(4), 308–314.
- Kalangi, S. J. R., 2013, Histofisiologi Kulit. *Jurnal Biomedik* Vol5(3): S12-20.
- Khanna, S., Biswas, S., Shang, Y., Collard, E., Azad, A., Kauh, C., Bhaskar, V., Gordillo, G.M., Sen, C.K., and Roy, S., 2010, Macrophage Dysfunction Impairs Resolution of Inflammation in the Wounds of Diabetic Mice, *Plos One*.
- Kiran, G., Nandini, C. D., Ramesh, H. P., Salimath, P. V., 2012, Progression of Early Phased diabetic Nephropathy in Streptozotocin-Induced Diabetic Rats: Evaluation of Various Kidney-Related Parameters, *Ind J Exp Biol.*; 50:133–40.
- Kidman, K., 2008, Tissue Repair and Regeneration: The Effects of Diabetes on Wound Healing. *Diabetic Foot Journal*. 11(2) 73-79.
- Kintoko., Karimatulhadj, H., Elfasyari, T. Y., Ihsan, E.A., Putra, T. A., Hariadi, P., 2017, Effect of Diabetes Condition on Topical Treatment of Binahong Leaf Fraction in Wound Healing Process. *Trad. Med. J.* 22(2):103-110.
- Kobayashi, K., Sakai, D., Iwashina, T., Iwabuchi, S., Mochida, J., 2009, Low Intensity Pulsed Ultrasound Stimulates Cell Proliferation, Proteoglycan Synthesis and Expression of Growth Factor Related Genes in Human Nucleus Pulposus Cell, *European Cells and Materials*, Vol. 17p 15-22.
- Krinke, G. G., 2000, The Laboratory Rat. In: G. Bullock and T. E. Bunton. eds. The Handbook of Experimental Animals. 1st ed. *San Diego: Academic Press*; 756.
- Kujath, P., Michelsen, A., 2008, Wounds-From Physiology to Wound Dressing. *Dtsch Arztebl Int.* 105(13): 239-48.
- Kumar, V., Cotran, R. S., Robbins, S. L., 1997, *Basic Pathology*. 6th ed., W.B. Saunders Company, pp. 26-40.

- Leng, X., Shang, J., Gao, D., Wu, J., 2018, Low Intensity Pulsed Ultrasound Promotes Proliferation and Migration of HaCaT Keratinocytes Through the PI3K/AKT and JNK Pathways, *Brazilian Journal of Medical and Biological Research* 51(12): e7862
- Leong, M., Murphy, K. D., Phillips, L. G., 2017, *Wound Healing*, In: Sabiston, *Textbook of surgery, The Biological Basic of Modern Surgical Practice, 20th ed*, W.B. Saunders, Elsevier, Inc Philadelphia. pp 130-160.
- Li, J., Kirsner, R. S., 2005, Extracellular Matrix and Wound Healing In Falabella A F, Krisner RS (eds), *Wound Healing*. New York : Taylor and Francis Group, pp 39-48.
- Lin, F. dan Prichard, J., 2011, *Handbook of Practical Immunohistochemistry*, Springer, p. 524.
- Lioupis, C., 2005, Effects of Diabetes Mellitus on Wound Healing: an update. *Journal of Wound Care*. 14(2) 84-86.
- Loureiro, T. C. A., Munhoz, C. D., Martins, J. O., Cerchiaro, G. A., Scavone, C., Curi, R., Sannomiya, P., 2007, Neutrophil Function and Metabolism in Individuals with Diabetes Mellitus, *Braz J Med Biol Res* 14(2) 84-86.
- Malizos, K. N., Hantes, M. E., Protopappas, V., Papachristos, A., 2006, Low-Intensity Pulsed Ultrasound for Bone Healing: An overview, *Int. J. Care Injured*, 37: 56 – 62.
- Marsell, R., Einhorn, T. A., 2010, Emerging Bone Healing Therapies. *J Orthop Trauma*, 24, pp 4-8.
- Mescher, A.L., 2011, *Histologi Dasar Junqueira Teks dan Atlas. 12th ed.*, Terj.: Dany, F.EGC, pp. 201-202, 309-316.
- Muchid, A., 2005, Pharmaceutical care untuk penyakit diabetes melitus, *Departemen kesehatan RI*, pp.1-89.
- Nanci, A., 2008, *Ten Cate's Oral Histology "Development, Structure, and Function". 7th ed*, CV Mosby Inc., St. Louis, pp 397-403.
- Newman, M.G., Takei, H., Caranza, F.A., 2002, *Carranza's Clinical Periodontology, 9th ed*, W.B. Saunders Company, Philadelphia, pp 263.
- Nooh, N., Graves, D. T., 2003, Healing is Delayed In Oral Compared to Dermal Excisional Wounds, *J Periodontal*, 74(2):242-6.
- Oryan, A., Meimandi, P. A., Shafiei, S. Z., Bigham, A. S., 2012, Human Platelet Rich Plasma Plus Parsian Gulf Coral Effects on Experimental Bone Healing in

Rabbit Model: Radiological, Histological, Macroscopical and Biomechanical Evaluation, *Cell Tissue Bank* 3(4): 639-51.

Parks, W. C., 2015, Matrix Remodeling by MMPs During Wound Repair. *Matrix Biology: Journal of the International Society for Matrix Biology*;44-46:113-121.

Paul, W. dan Sharma, C. P., 2004, Chitosan and Alginate Wound Dressings : a Short Review, *Trends Biomater Artificial Organs*, 18: 18-23.

Parham, P., 2005, *The Immune System. 2nd ed.*, Garland Science, pp. 243-247.

Petrica, A., Brinzeu, C., Brinzeu, A., Petrica, R., Ionac, M., 2009, Accuracy of Surgical Wound Infection Definitions - The First Step Towards Surveillance of Surgical Site Infections, *Timisoara Medical Journal*, 59 (3-4), 362-365.

Pithon-Curi, T. C., Schumacher, R. I., Freitas, J. J., Lagranha, C., Newsholme, P., Palanch, A. C., Glutamine Delays Spontaneous Apoptosis in Neutrophils. *Am J Physiol Cell Physiol* 2003; 284: C1355-C1361.

Prasetyo, B. F., Wientarsih, I., Priosoeryanto, B. P., 2010, Aktivitas sediaan gel ekstrak batang pohon pisang ambon dalam proses penyembuhan luka pada mencit. *Jurnal Veteriner*;11(2):70-3.

Ramos-Vara, J. A., 2005, Review Article : Technical Aspect of Immunohistochemistry, *Journal Vet.Phatol*; 42:405-426.

Ribeiro, D., Freitas, M., Tome, S.M., Silva, A.M.S., Laufer, S., Lima, J.L.F. C., Fernandes, E., 2015, Flavonoids Inhibit COX-1 and COX-2 Enzymes Cytokine/Chemokine Production in Human Whole Blood, *Inflammation*, 38(2): 858-70.

Ridwan, E., 2013, Etika Pemanfaatan Hewan Percobaan dalam Penelitian Kesehatan, *J Indon Med Assoc*, Volum: 63, Nomor: 3, Maret.

Retzeppi, M. dan Donos, N., 2010, Invited Review, The Effect of Diabetes Mellitus on Osseous Healing, *Clinical Oral Implant Research*.21,673-68.

Robbins, S. L., Kumar, V., Cotran, R. S., 2007, *Buku Ajar Patologi*, Alih Bahasa: Staf Pengajar Laboratorium Patologi Klinik Fakultas Kedokteran Universitas Airlangga, 7thed., EGC, Jakarta, pp:28-64.

Rosa, N., Simoes, R., Magalhaes, F. D., Marques, A. T., 2016, From Mechanical Stimulus to bone Formation : A review, *Medical engineering and Physics J*, 37, pp 719-728.

- Rousseau, G., Blouin, A., Monchalain, J. P., 2012, Non-Contact Photo- Acoustic Tomography and Ultrasonography for Tissue Imaging,” *Biomed. Opt. Express*3(1), 16–25 (2012).
- Saladin, K. S., 2010, *Anatomy and Physiology The Unity of Form and Function*. McGraw-Hill Companies, Inc, New York.
- Salazar, J., Ennis, W., Koh, T., 2016, Diabetes Medication : Impact on Inflammation and Wound Healing. *J Diabetes Complication*. 30(4) : 746-752.
- Sayogo, W., Widodo, A. D., Dachlan, P., 2017, Potensi +Dalethyne Terhadap Epitelisasi Luka Pada Kulit Tikus yang Diinfeksi Bakteri MRSA. *Jurnal Biosains Pascasarjana*, vol 19.
- Scher, J. U., Pillinger, M. H., Abramson, S. B., 2010, Nitric oxide synthases and osteoarthritis. *In : Fundamental in Inflammation. Curr Rheumatol Rep* 9(1):9–15.
- Shiraishi, R., Masaki, C., Toshinaga, A., Nishihara T., Yamanaka, N., Nakamoto, T., dan Hosokawa, R., 2011, The Effect of Low Intensity Pulsed Ultrasound Exposure on Gingival Cells, *J. Periodontol.*, 82(10): 1498-1503.
- Shindo, T., Ito, K., Ogata, T., Hatanaka, K., Kurosawa, R., Eguchi, K., Kagaya, Y., Hanawa, K., Aizawa, K., Shiroto, T., Kasukabe, S., Miyata, S., Taki, H., Hasegawa, H., Kanai, H., Shimokawa, H., 2015, Low-Intensity Pulsed Ultrasound Enhances Angiogenesis and Ameliorates Left Ventricular Dysfunction in a Mouse Model of Acute Myocardial Infarction, *Arterioscler Thromb Vasc Biol*;36:1220-1229.
- Sima, C. dan Glogauer, M., 2014, Neutrophil Dysfunction and Host Susceptibility to Periodontal Inflammation : Current Knowledge, *Curr.Oral health Rep*, 1:95-103.
- Southgate, J., Masters, J. R., Trejdosiewicz, L. K.,2002, *Culture of human urothelium*. In: Freshney, R. I, Freshney, M. G., Culture of epithelial cells. 2nded., New York: J. Wiley and Sons, Inc., pp. 381–400.
- Sundberg, J.P., Nanney, L.B., Fleckman, P.,King, L.E., 2012, *Skin and Adnexa, Comparative Anatomy and Histology*. Elsevier Inc., p 433.
- Sun,J., Hong, R., Chang, W. H., Chen, L., Lin, F., Liu, H., 2001, In Vitro Effect of Low Intensity Pulse Ultrasound Stimulation On The Bone Cell. *J Biomed Res* 57:449-456.
- Suvarna, S. K., Layton, C., Bancroft, J. D., 2018, *Bancroft’s Theory and*

Practice Of Histological Techniques : 8th edition. Elsevier: p 195-198.

- Szkudelski, T., 2012, Streptozotocin–Nicotinamide Induced Diabetes in The Rat. Characteristics of the experimental model. *Experimental Biology and Medicine* 237: 481–490.
- Sjamsuhidajat, R. dan De Jong, W., 2010, *Buku Ajar Ilmu Bedah. 3rded.,*. EGC, Jakarta, p.67.
- Soegondo, P., 2015, Challenges in Diabetes Management in Indonesia: a literature review, licensee *BioMed Central Ltd, Globalization and Health* 2013, 9:63.
- Sudoyo, A. W., Setiyohadi, B., Alwi, I., Simadibrata, M., Setiati, S., 2009, *Buku Ajar Ilmu Penyakit Dalam, 5thed.,* Jilid 3. Interna Publishing.
- Tian, S., Li, M., Dong, F., Zhang, F., 2016, The Role of Low-Intensity Pulsed Ultrasound on Bone and Soft Tissue Healing, *Int J Clin Exp Med*;9(7):12450-12456.
- Tuhin, R. H., Begum, M. M., Rahman, S., Karim, R., Begum, T., Ahmed, S. U., 2017, Wound Healing Effect of *Euphorbia Hirta* Linn. (Euphorbiaceae) in Alloxan Induced Diabetic Rats. *BMC Complementary and Alternative Medicine*. 17(432): 1-14.
- Townsend, C. M., Beauchamp, R. D., Evers, B. M., Mattox, K. L., 2012, *Sabiston Textbook of Surgery, 19thed.,* Elsevier Saunders, pp. 60-62.
- Valero, A. M., Garcia, J. C. F., Ballester, A. H., Rueda, C. L., 2007, Effects of Diabetes on the Osseointegration of Dental Implants, *Med Oral Patol Oral Cir Bucal*;12:E38-43.
- Vidinsky, B., Toporcer, T., Longauer, F., Lendhart, L., Bobrov, N., Sabo, J., 2006, Histological Study of The First Seven Days of Skin Wound Healing in Rats, *Acta Vetbrno*:75;197-202.
- Velnar, T., Bailey, T., Smrkoli V., 2009, The Wound Healing Process : an Overview of the Cellular and Molecular Mechanism. *The Journal of International Medical Research* 37:1528-1542.
- Vieyra, R.C., Rosales, C., Uribe–Querol, E., 2016, Neutrophil Functions in Periodontal Homeostasis, *J Immunol Res.*, 2016:1-9.
- Volmer, T. M., Lobmann, R., 2016, Neuropathy and Diabetic Foot Syndrome. *Int. J. Mol. Sci.* 17(917): 1-11.

- Watson, T., 2008, *Electrotherapy: Evidence-Based Practice*, 12th ed., Churchill Livingstone Elsevier, Edinburgh.
- Wilgus, T. A., Roy, S., Jodi, C., McDaniel, 2013, Neutrophils and Wound Repair: Positive Actions and Negative Reactions, *Advances in Wound Care*, volume 2, number 7 Copyright by Mary Ann Liebert, Inc.
- Wilkins, E. M., 2009, *Clinical Practice of The Dental Hygienist*, 10th ed., Lipincot William & Wilkins, Philadelphia, pp.1067-1070.
- Yadollahpour, A., Mostafa, J., Samaneh, R., Zohreh, R., 2014, Ultrasound Therapy for Wound Healing: A Review of Current Techniques and Mechanisms of Action, *Journal of Pure and Applied Microbiology* : Vol. 8(5), p. 4071-4085.
- Yamabayashi, 1987, Periodic Acid Schiff-Alcian Blue : A Method for The Differential Staining of Glycoprotein, *Histochemical journal* 19, 565-571.
- Yang, Q., Nanayakkara, G. K., Drummer, C., Sun, Y., Johnson, C., Cueto, R., Fu, H., Shao, Y., Wang, L., Yang, W. Y., Tang, P., Liu, L. W., Ge, S., Xia., 2017, Low-Intensity Ultrasound-Induced Anti-inflammatory Effects are Mediated by Several New Mechanisms Including Gene Induction, Immunosuppressor Cell Promotion, and Enhancement of Exosome Biogenesis and Docking, *Frontier in Physiology*, 8:818.
- Yunadir, 2008, *Buku Panduan Laboratorium Histopatologi*, Fakultas Kedokteran, Universitas Gadjah Mada, pp.2-7.
- Zhong, S. P., Zhang, Y. Z., Lim, C. T., 2010, Tissue Scaffolds for Skin Wound Healing and Dermal Reconstruction. John Wiley And Sons Inc., *WIREs Nanomed Nanobiotechnol.* Vol 2, September : 510-525.
- Zhou, S., Bachem, M.G., Seufferlein, T., Li, Y., Hans, J., Gross, Schmelz, A., 2008, Low Intensity Pulsed Ultrasound Accelerates Macrophage Phagocytosis by a Pathway that Requires Actin Polymerization, Rho, and Src/MAPKs Activity, *Cellular Signalling* (20)695–704.