

## DAFTAR PUSTAKA

- Abbas, A.C., Alwaeli, A.Z., Abbas, E.C., Mohamed, A., 2021, Effect of honey consumed of COVID-19 patients over time and changes in concentration levels of antioxidants and oxidative stress in the patients over time and compare with control group, *Annal R.S.C.B*, 25(6):8961-74
- Alikhani, M., Chou, M.Y., Khoo, E., Alansari, S., Kwal, R., Elfersi, T., Almansour, A., Sangsuwon, C., Al Jearah, M., Nervina, J.M., Teixeira, C.C., 2018, Age-dependent biologic response to orthodontic forces, *Am J Orthod Dentofacial Orthop*, 153(5):632-44
- Ariffin, S.H.Z, Wahab, R.M.A, 2011, Cellular and molecular changes in orthodontic tooth movement, *Sci World J* 2011(11):1788-93
- Asiry, M.A., 2018, Biological aspect of orthodontic tooth movement: A review of literature, *Saudi J Biol Sci*, 25(6): 1027-32
- Bell, M.R., 2008, Comparing postnatal development of gonadal hormones and associated social behaviors in rats, mice, and humans, *Endocrin* ;159:2596–2613
- Bibi, T., Khurshid, Z., Rahman, A., Imran, E., Srivastava, K.C., Shrivastava, D., 2021, Gingival crevicular fluid(GCF): a diagnostic tool for detection of periodontal health and disease, *Mol*, 26(5):1208
- Bjorklund B.R., 2015, *J. adulthood.*, 8th ed, Harlow:Essex, hal 81-3
- Boskey, A.L, Coleman, R., 2010 Aging and Bone, *J Dent Res*, 89(12): 1333-48
- Bourke, A., Daskalogiannakis, J., Tompson, B., Watson, P., 2010, Force characteristics of nickel-titanium open-coil springs, *Am J Orthod Dentofac Orthop* 2010(138):142-7
- Bull, H, Murray, P.G., Thomas, D., Fraser, A.M., Nelson, P.N., 2002, Acid Phosphatase, *J Clin Pathol Mol Path*, 55:65-72
- Burstone C.J., 1962, *The biomechanics of tooth movement*, Lea and Febiger: Philadelphia, hal.132-4
- Camassa, J.A., Diogo, C.C., Bordelo, P.A., Bonelii, M, A., Viegas, C.A., Azevedo, J.T., Dourado, N., Dias, I.R., 2017, Tartrate-resistant acid phosphatase as biomarker of bone turnover over the lifespan and different physiologic stages in sheep, *BMC Vet Res*, 13:239

- Corrado, A., Cici, D., Rotondo, C., Maruotti, N., Cantatore, F.P., 2020, Molecular basis of bone aging, *Int J Mol Sci*, 21(10):62-8
- Dahlan, M.S., 2011, *Statistik untuk Kedokteran dan Kesehatan*, Jakarta: Salemba Medika, hal.36
- Demontiero, O., Vidal, C., Dugue, G., 2012, Aging and Bone Loss: New Insight for the the Clinician, *Adv Musculoskeletal*, 4(2):61-76
- Domazetovic, V., Marcucci, G., Iantomasi, T., Brandi, M.L., Vincenzini, M.T., 2017, Oxidative stress in bone remodeling: role of antioxidants, *Clin Case Miner Bone Metab*, 2017(2):2009-16
- Dutra, E.H., Ahmida, A., Lima, A., Schneider, S., Nanda, R., Yadav, S., 2018, The effects of alveolar decortications on orthodontic tooth movement and bone remodeling in rats, *Eur J Orthod*, 40(4):423-29
- Effendy, N.M., Mohamed, N., Muhammad, N., Mohamad, I.N., Shuid, A.N., 2012 The Effects of tualang honey on bone metabolism of postmenopausal women, *Hindawi*, Article ID:938574
- Firth, F.A., Farrar, R., Farella, M., 2019, Investigating orthodontic tooth movement: challenges and futurw directions, *J Roy Soc New Zealand* DOI:10.1080/103036758.2019.1684957
- Graves, D.T., Kayal, R.A., Oates, T., Garlet, G.P., 2011, *Osteoimmunology in the oral cavity (Periodontal disease, lesions of endodontic origin and orthodontic tooth movement, Osteoimmunology)*, Academic Press Elsevier: Philadelphia, hal.186
- Guvva, S., Patil, M.B., Mehta, P.S., 2017, Rats as a laboratory animal model in periodontology, *Int J Oral Health Sci*, 7:68-75
- Halleen, J.M., Alatalo, S.L., Suominen, H., Cheng, S., Janckila, A.J., Vaananen, H.K., 2000, Tartrate-resistant acid phosphatase 5b: A novel serum marker of bone reorbtiion, *J Bone and Miner Res*, 15(7):1337-45
- Harris, A.D, McGregor, J.C., Perencevich, E.N., Furuno, J.P., Zhu, J., Peterson, D.E., Finkelstein, J., 2006, The Use and Interpretation of Quasi-Experimental Studies in Medical Informatics, *J Am Med Inform Assoc*, 13(1):16-23
- Hayman, A.R., 2008, Tartrate-resistant acid phosphatase (TRAP) and the osteoclast/immune cell dichotomy, *Autoimmun*, 40(3):218-23

- Insoft, M., King, G.J., Keeling, S.D., 1996, The measurement of acid and alkaline phosphatase in gingival crevicular fluid during orthodontic tooth movement, *Am J Orthod Dentofacial Orthop*, 109:287-96
- Kamaruzzaman, M.A., Chin, K., Ramli, E.S.M., 2019, A review of potential beneficial effect of honey on bone health, *Hindawi*, Article ID:8543618
- Karen, B., Karl-Heinz Krause, 2007, The NOX family of ROS-generating NADPH oxidases: Physiology and Pathophysiology, *Physiol Rev*, 87:243-5
- Kasim, N.A., Ariffin, S.H.Z., Shahidan, M.A., Abidin, I.Z.Z., Senafi, S., Jemain, A.Z., Wahab, R.M.A., 2013, Stability of Lactate dehydrogenase, aspartate aminotransferase, alkaline phosphatase and tartrate resistant acid phosphatase in human saliva and gingival crevicular fluid in the presence of protease inhibitor, *Biol Sci*, 65(3):1131-40
- Kavadia-Tsatala, S., Kaklamanos, E.G. and Tsalikis, L., 2002, Effects of orthodontic treatment on gingival crevicular fluid flow rate and composition: clinical implications and applications, *Int J of Adult Orth and Orthog Surg*, 2002(17):191-205
- Keeling, S.D., 1993, Serum and alveolar bone phosphatase changes reflect bone turnover during orthodontic tooth movement, *Am J Orthod Dentofacial Orthop*, 103(4):320-6
- King, G. J., Keeling, S. D., McCoy, E. A., Ward, T. H., 1991, Measuring dental drift and orthodontic tooth movement in response to various initial forces in adult rats, *Am J Orthod Dent Orthop*, 45-65
- Kirschneck, C., Bauer, M., Gubernaor, J., Proff, P., Schröder, A., 2020, Comparative assessment of mouse models for experimental orthodontic tooth movement, <https://doi.org/10.1038/54158-020-69030-x>
- Kirstein, B., Chambers, T.J., Fuller, K., 2006, Secretion of tartrate-resistant acid phosphatase by osteoclast correlates with resorption behaviour, *J Cell Biochem*, 98:1085-94
- Kumar A.A., Saravan, K., Kohila, K., Kumar, S.S., 2017, Biomarkers in orthodontic tooth movement, *J Pharm Bioallied Sci*, 7(2):325-30
- Li, X., Li, M., Lu, J., Hu, Y., Oul, L., Zhang, D., Yang, Y., 2016, Age-related effects on osteoclastic activities after orthodontic tooth movement, *B J Res*, 5(10):492-9

- Li, Y., Jacox, L., Little, S.H., Ko, C., 2018, Orthodontic tooth movement: The biology and clinical implications, *Kaohsiung J of Med Sci*, 34:207-14
- Linder, C.H., Ek-Rylander, B., Krumpel, M., Norgard, M., Narisawa, S., Millan, J.L., Andersson, G., Magnusson, P., 2017, Bone alkaline phosphatase and tartrate-resistant acid phosphatase: Potential Co-regulators of bone mineralization, *Calcif Tissue Int*, 101(1): 92-101
- Mahartsberger, C., Seldenbusch, W., 1996, Force delivery of NiTi coil springs, *Am J of Orth and Dent Orth*, 109(1):132-4
- Maria, S., Kamath, V.V., Krishnanand, P.S., Komali, R., 2022, Sprague dawley rats are a sustainable and reproducible nimal model for induction and study of oral submucous fibrosis, *J Orofacial Sci*, 7(1):11-8
- Marty, M.S., Chapin , R.E., Parks, L.G., Thorsrud, B.A., 2003, Development and maturation of the male reproductive system. *Birth Defects Res B Dev Reprod Toxicol* ;68:125–136
- Misawa-Kageyama, Y., Kageyama, T., Moriyama, K., Kurihara, S., Yagasaki, H., Deguchi, T., Ozawa, H., Sahara, N., 2007, Histomorphometric study on the effects of age an orthodontic tooth movement and alveolar boe turnover in rats, *Eur J Oral Sci*, 115:124-30
- Nomura, Y., Shimada, Y., Hanada, N., Numabe, Y., Kamoi, K., Sato, T., Gomi, K., Arai, T., Inagati, K., Fukuda, M., Noguchi, T., Yoshie, H., 2012, Salivary biomarkers for predicting the progression of chronic periodontitis, *Oral Biol*, 57:413-20
- Noxon, S.J., King, G.J., Huang, G., 2001, Osteoclast clearance from periodontal tissues during orthodontic tooth movement, *Am J Orthod Dentofacial Orthop*, 120(5):466-76
- Omi,M., Mishina, Y., 2022, Roles of osteoclast in alveolar bone, *Genes*, 60:8-9
- Östman, B. Michaëlsson, K, Hemersson, H., Byberg, L., Gedeberg, R., Melhos, H., Basu, S., 2009, Oxidative sress and bone mineral density in elderly men: antioxidant activity of alpha-tocopherol, *Free Radic Biol Med*, 47(5):668-73
- Perinetti, G., Capelli, J., 2017, The gingival crevicular fluid as a source of biomarkers to enhance efficiency of orthodontic and functional treatment of growing patients, *Hindawi*, Article ID:3257235
- Pietschmann, P., Skalicky, M., Krensel, M., Rauner, M., Hofbauer, G., Stupphann, D., Viidik, A., 2007, Bone structure and metabolism in a rodent model of male senile osteoporosis, *Exp Gerontol*, 42(11); 1099-108

- Proffit, W.R.; Fields, H.W.; Sarver, D.M., 2013, *Contemporary orthodontics 5<sup>th</sup> ed*, St.Louis, Missouri: Elsevier
- Phulari, B.S., 2011, *Ortodontics principles and practice*, Jaypee Brother Medical Publishers: New Delhi, hal 112
- Quinn R., 2005, Comparing rat's to human's age: how old is my rat in people years? *Nutri*: 21:775–7
- Ren, Y, Maltha, J.C., Kuijpers-Jagtman, A.M, 2004, The rat as a model for orthodontic tooth movement- a critical review and a proposed solution, *Eur J of Orth*, 26:483-90
- Ren, Y., Kuijpers-Jagtman, A.M.;], Maltha, J.C., 2005, Immunohistochemical evaluation of osteoclast recruitment during experimental tooth movement in young and adult rats, *Oral Biol*, 50: 1032-9
- Rody, W.J., 2001, Osteoclast recruitment to sites of compression in orthodontic tooth movement, *Am J Orthod Dentofacial Orthop*, 120(5)-477-89
- Sabane, A., Patil, A., Swami, V., Nagarajan, P., 2016, Biology of tooth movement, *Br J Med Res*, 16(2):1-10
- Samarghandian, S., Farkhondeh, T., Samini, F., 2017, Honey and health: a review of recent clinical research, *Pharmacognosy Res.*, 9(2):121-127
- Sengupta, P., 2013, The laboratory rat: Relating its age with human's, *Int J of Prev Med*, 4(6):624-30
- Silvana, P.B., Ray, W., Steven, O., Thiago, M., 2016, Gingival crevicular as a source of biomarkers for periodontitis, *Periodontal*, 70(1): 53-64
- Singla, L., Singla, D., 2011, An efficient method of open coil spring insertion, *J Ind Orthod Soc*, 45(4):265-6
- Solberg, L.B., Stang, E., Brorson, S.H., Andersson, G., Reinholt, F.P., 2015, Tartrate-resistant acid phosphatase (TRAP) co-localizes with receptor activator of NF-KB ligand (RANKL) and osteoprotegerin (OPG) in lysosomal-associated membrane protein 1 (LAMP1)-positive vesicles in rat osteoblasts and osteocytes, *Histochem Cell Bio*, 143:195-207
- Sousa, C.P, Dias, I.R., Lopez-Pena, M., Camassa, J.A., Lourenco, P.J., Judas, F.M., Gomes, M.E., Reis, R.L., 2015, Bone turnover markers for early detection of fracture healing disturbances: A review of the scientific literature, *An Acad Bras Sci*, 87(2):1049-61

- Stanley, D.P., Shetty, A.K., 2004, Aging in the rat hippocampus is associated with widespread reductions in the number of glutamate decarboxylase-67 positive interneurons but not interneuron degeneration, *J Neurochem*; 89:204–16
- Subbarao, K.C., Nattuthural, G.S., Sundararajan, S.K., Sujith, I., Joseph, J., Syedshah, Y.P., 2019, Gingival crevicular fluid: an overview, *J.Pharm Bioallied Sci*, 11(suppl 2): 135-9
- Suparwitri, S.S., Pudyani, S.P., Haryana, S.M., Agustina, D., 2016, Effect of soy isoflavone genistein on orthodontic tooth movement in guinea pigs, *Dent J*, 49(3):168-74
- Suparwitri, S., Rosyida, N.F., Alhasyimi A.A., 2019, Wheat seeds can delay orthodontic tooth movement by blocking osteoclastogenesis in rats, *Clin Cosmer Investig Dent*, 9(11):243-9
- Tsamesidis, I., Egwu, C.O., Samara, D., Vogiatzi, D., Lettas, A., Lymperaki, E., 2022, Effects of greek honey and propolis on oxidative stress and biochemical parameters in regular blood donors, *J Xenobiot*, 12(1):13-20
- Ustadi, Radiati, L.E., Thohari, I., 2017, Komponen Bioaktif pada Madu Karet (*Hevea brasiliensis*) Madu Kaliandra (*Calliandra calothyrsus*) dan Madu Randu (*Ceiba pentandra*), *J Ilmu Tek Hasil Ternak*, 97-102
- Vidal, J.D., 2017, The impact of age on the female reproductive system, *Toxicol Pathol* ;45:206–15
- Wahab, R.M.A., Dasor, M.M., Senafi., Abdullah, A.A.A., Jemain, A.A., Kasim, N.A., Yamamoto, Z., Ariffin, S.H.Z, 2011, Crevicular tartrate resistant acid phosphatase activity and rate of the tooth movement under different continuous force application, *Afr J Pharm and Pharmacol*, 5(20);2213-19
- Yudaniayanti, I.S., Primarizky, H., Nangoi ,L., Yuliani, G.A, 2019, Protective effects of honey by bees (*Apis dorsata*) on decreased cortical thickness and bone impact strength of ovariectomized rats as models for menopause, *Vet World*, EISSN:2231-0916