

DAFTAR PUSTAKA

- Albuquerque, AFM., Fonteles, CSR., do Val, DR., Chaves, HV., Bezerra, MM., Pereira, KMA., de Barros Silva, PG., de Lima, BB., Soares, ECS., Ribeiro, TR., Costa, FWG., 2017, Effect Of Pre-Emptive Analgesia On Clinical Parameters And Tissue Levels Of TNF-A And IL-1b In Third Molar Surgery: A Triple-Blind, Randomized, Placebocontrolled Study. *Int. J. Oral Maxillofac. Surg* 46(12):1615-1625.
- Agrawal M , Rahman QB , Naulakha D , Karki R., 2017, assessment of pain and trismus and determining the difficulty level of tooth extraction with modified parant scale, *BJHS* ;2(3)4 : 282 - 286
- Alemdaroglu, C., Degim., Z., Celebi, N., Zor, F., Ozturk, S., Erdogan, D., 2006, An Investigation on Burn Wound Healing in Rats with Chitosan Gel Formulation Containing Epidermal Growth Factor, *Burns*, 32(3): 319 – 327
- Artuc, M., Hermes, B., Steckelings, K.M., Grützkau, A., Henz, B.M., 1999, Mast cells and their mediators in cutaneous wound healing – active participants or innocent bystanders? *Exp Dermatol*, 8(1):1-16.
- Alsarra IA, 2009. Chitosan Topical Gel Formulation in the Management of Burn Wounds. *International Journal of Biological Macromolecules* 2009; 45: 16-21
- Avery, B., Brown, J.S., Carter, J.L.B., Corrigan, A.M., Haskell, R., Leopard, P.J., Williams, J.L., Loukota, R.A., Lowry, J., McManners, J., Mitchell, D., Pedlar, J., Shepherd, D., Taylor, G., Whear, N., Williams, J.K., Worrall, S.F., 2004, *Current Clinical Practice And Parameters Of Care. The Management Of Patients With Third Molar (Syn: Wisdom) Teeth.*, National Clinical Guidelines. Available at: [http://www.rcseng.ac.uk/fds/publicationsclinicalguidelines/clinical guidelines/ documents/3rdMolar.pdf](http://www.rcseng.ac.uk/fds/publicationsclinicalguidelines/clinical%20guidelines/documents/3rdMolar.pdf).
- Azuma, K., Tomohiro O, Saburo M., Yoshiharu O., 2015, Anticancer and Anti-Inflammatory Properties of Chitin and Chitosan Oligosaccharides, *J. Funct. Biomater*, 6
- Balaji, S.M., 2013, *Textbook of Oral and Maxillofacial Surgery*, 2nd ed, RR Donnelly Publishing India Pvt. Ltd., India, pp:154-163, 345-382.
- Barbato, L., Kalemaj, Z., Buti, J., Baccini, M., La Marca, M., Duvina, M., Tonelli, P., 2016, Effect of Surgical Intervention for Removal of Mandibular Third Molar on Periodontal Healing of Adjacent Mandibular Second Molar: A Systematic Review and Bayesian Network Meta-Analysis, *Journal of Periodontology*, 87(3):291-302.

- Bosshardt, D.D. dan Lang, N.P., 2005, The Junctional Epithelium: from Health to Disease, *J Dent Res*, 84(1):9-20.
- Brancato, S.K., Albina, J.E., 2011, Wound Macrophages as Key Regulators of Repair: Origin, Phenotype, and Function, *The American Journal of Pathology*, 178:19-25.
- Bruck, W.M., Slater, J.W., Carney, B.F., 2011, *Chitin and Chitosan from Marine Organism*. Dalam Se-Kwon K., Chitin, Chitosan, Oligosaccharides and Their Derivatives (Biological Activities and Applications), Taylor and Francis Group, Florida, hal 11-24
- Carriches, C.L., Gonzalez, J.M.M., and Rodrigues. M.D., 2006, The use of methylprednisolon versus diklofenac in the treatment of inflammation and trismus after surgical removal of lower third molars, *Med Oral Cir Bucal* 11: E440-5.
- Chandrasoma, P., dan Taylor, C.R., 2005, *Ringkasan Patologi Anatomi*, (terj.), E.G.C., Jakarta, 2nd ed : 34-66.
- Chaurand-Lara, J., and Facio-Umafia, J.A., 2013, Methilprednisolone injection following the surgical extraction of impacted lower third molars : asplit-mouth study, *Open Journal of Stomatology*, 3, 192-196.
- Childs, D.R., Murthi, A.S., 2017, Overview of wound healing and management, *Surg Clin N Am*, 97:189-207.
- Chu FCS, TKL Li, VKB Lui, PRH Newsome, RLK Chow, LK Cheung, 2003, Prevalence of impacted teeth and associated pathologies a radiographic study of the Hong Kong Chinese population, *Hong Kong Med J* 9:158-63
- Chuang, S.K., Perrott, D.H., Susarla, S.M., Dodson, T.B., 2007, Age as a risk factor of third molar surgery complications, *J Oral Maxillofac Surg*, 65:1685-92
- Chuang, S.K., Perrott, D.H., Susarla, S.M., Dodson, T.B., 2008, Risk factors for inflammatory complications following third molar surgery in adults, *J Oral Maxillofac Surg*, 66:2213-8.
- Costa P.A.R., Reis, R.L., Neves, N.M., 2011, Scaffold Based Bone Tissue Engineering : The Role of Chitosan, *Tissue Eng Part B Rev*, 17(5) :331
- Dahlan, M.S., 2009, *Besar sampel dan cara pengambilan sampel dalam penelitian kedokteran dan kesehatan*, 2nd ed, Penerbit Salemba Medica, Jakarta, pp:21
- Dai, T., Tanaka, M., Huang, Y.Y., Hamblin, M.R., Chitosan preparations for wounds and burns: antimicrobial and wound-healing effects, *Expert Rev Anti Infect Ther.*; 9(7): 857–879.

- Darawade, D.A., Kumar, S., Mehta, R., Sharma, A.R., Reddy, G.S., 2014, In search of better option: dexamethasone versus methylprednisolone in third molar impaction surgery, *J Int Oral Health*, 6(6):14-17.
- De Jesus, G.J.P., 2015, The effects of chitosan in the healing process of the oral mucosa, , *Oral Surg Oral Med Oral Pathol Oral Radiol Endod*, 122:10-20.
- Dhanrajani, P.J., and Jonaidel, O., 2002, Trismus: aetiology, differential diagnosis and treatment, *Dental Update*, 29 : 88-94
- Dutta, S.R., Passi, D., Singh, P., Sharma, S., Singh, M., Srivastava, D., 2016, A randomized comparative prospective study of platelet-rich plasma, platelet-rich fibrin, and hydroxyapatite as a graft material for mandibular third molar extraction socket healing, *Natl J Maxillofac Surg*, 7:45-51.
- Dwiartyani NG, 2012. Efek Xyilitol dan Propilen Glikol Terhadap Stabilitas Fisik Gel Imunnoglobulin Kuning Telur (Ig Y) (Eksperimental Laboratorik). Tesis. Program Spesialis Konservasi Gigi, Fakultas Kedokteran Gigi, Universitas Indonesia, Jakarta. pp: 13-4
- Eldibany, R.M., 2014., Platelet rich fibrin versus Hemcon dental dressing following dental extraction in patients under anticoagulant therapy., *ScienceDirect Tanta Dental Journal* 20 : 1-10
- Elo, J.A., Sun, H.H., Dong F., Tandon, R., Singh, H.M., 2016, Novel incision design and primary flap closure reduces the incidence of alveolar osteitis and infection in impacted mandibular third molar surgery, *Oral Surg Oral Med Oral Pathol Oral Radiol Endod*, 122:124-133.
- Ezoddini, F A., Alireza N A., Soghra Y., Farhad F., Gholamreza R., Effects of chitosan on dental bone repair, <http://www.scirp.org/journal/HEALTH/>
- Fiorellini, J.P., dan Stathopoulou, P.G., 2012, Anatomy of periodontium dalam Newman, M.G., Takei, H.H., Klokkevold, P.R., Carranza, F.A., *Carranza's clinical periodontology*, 12th Ed., Elsevier, St. Louis, hal. 9-39.
- Fragiskos, F.D., 2007, *Oral Surgery*. Springer Verlag, Berlin, hal. 31-41, 95-200.
- Gay-Escoda, C., Gómez-Santos, L., Sánchez-Torres, Herráez-Villas, J-M., 2015, Effect of the suture technique on postoperative pain, swelling and trismus after removal of lower third molars: a randomized clinical trial, *Med Oral Patol Oral Cir Bucal*, 20:372-377.
- Goldberg, S.R., Diegelmann, R.F., 2010, Wound healing primer, *Surg Clin N Am*, 90:1133–1146.

- Gupta, Akshat., Vidya Rattan, Sachin Rai, 2018, Efficacy of Chitosan in promoting wound healing in extraction socket: a prospective study, *Journal of Oral Biology and Craniofacial Research* doi: <https://doi.org/10.1016/j.jobcr.2018.11.001>.
- Han, Y., Luhang Z., Zhijun Y., Jie F., Qiqi Y., 2005, Role of mannose receptor in oligochitosan-mediated stimulation of macrophage function, *International Immunopharmacology* 5., 1533–1542
- Harper, D., Young, A., McNaught, C.E., 2014, The physiology of wound healing, *Surgery*, 32:445-450.
- Harrison, J.A., Nixon, M.A., Fright, W.R., Snape, L., 2004, Use of hand-held laser scanning in the assessment of facial swelling: a preliminary study, *Br J Oral and Maxillofac Surg*, 42:8-17.
- Houlton, J.J., Hom, D.B., 2013, Approaching delayed-healing wounds on the face and neck, *Facial Plast Surg Clin N Am*, 21:81–93.
- Hupp, J.R., Ellis III, E., Tucker, M.R., 2014, *Contemporary oral and maxillofacial surgery*, 6th ed, Mosby Co., St. Louis, 43-64, 144-173.
- Jacob, J., Peter, G., Thomas, S., Haponiuk, J.T., Gop, S., 2019, Chitosan and polyvinyl alcohol nanocomposites with cellulose nanofibers from ginger rhizomes and its antimicrobial activities, *International Journal of Biological Macromolecules* 129: 370–376
- Jephcott, A., 2007, The surgical management of the oral soft tissues, *1. Flap Des Dent Update*, 34:518–20.
- Joshi, A.D., Saluja, H., Mahindra, U., Halli, R., 2011, A comparative study: efficacy of tissue glue and sutures after impacted mandibular third molar removal, *J Maxillofac Oral Surg*, 10:310-315.
- Kaban, K., Rahajoe, P.S., 2017, Pengaruh pemberian peroral metilprednisolon dibanding ketorolac trometamine praodontektomi terhadap nyeri, edema dan trismus pascaodontektomi, impaksi molar tiga bawah, *Thesis*, FKG Universitas Gadjah Mada, Yogyakarta
- Kale, T.P., Singh, A.K., Kotrashetti, S.M., Kapoor, A., 2012, Effectiveness of Hemcon Dental Dressing versus Conventional Method of Haemostasis in 40 Patients on Oral Antiplatelet Drugs, *Sultan Qaboos University Med J*, Vol. 12, Iss. 3, pp. 330-335, Epub. Jul 12
- Khande, K., Saluja, H., Mahindra, U., 2011, Primary and secondary closure of the surgical wound after removal of impacted mandibular third molars, *J. Maxillofac. Oral Surg.*, 10(2):112–117.

- Kim, J.C., Choi, S.S., Wang, S.J., Kim, S.K., 2006, Minor complications after mandibular third molar surgery: type, incidence, and possible prevention, *Oral Surg Oral Med Oral Pathol Oral Radiol Endod*, 102:4-11.
- Kim, S., Bedigrew, K., Guda, T., 2014, Novel Osteoinductive Photo-Cross-Linkable Chitosan-Lactide-Fibrinogen Hydrogels Enhance Bone Regeneration in Critical Size Segmental Bone Defects, *Acta Biomaterialia*, vol. 10, (12) p.: 5021-5033.
- Kmiec, M., Pighinelli, L., Silva, M.,Machado., Reis, Victória Oliva dos., 2017, Chitosan-Properties and Applications in Dentistry, *Adv Tissue Eng Regen Med Open Access*, 2(4): 00035
- Klongnoi, B., Kaewpradub, Boonsiriseth, K., and Wongsirichat, N., 2012 : Effect of single dose preoperative intramuscular dexamethasone injection on lower impacted third molar surgery, *Int. J. Oral Maxillofacial Surg*. 41: 376-379.
- Koo, P.J.S., 2003, Acute Pain Management, *Journal Of Pharmacy Practice*,16(4): 231–248
- Kumar, S., Gupta, K.K, Bhowmick, D., Singh, A., 2015, Concepts of healing in periodontal therapy - part I, *IOSR-JDMS*, 14(10):89-101.
- Larjava, H., 2012, *Oral wound healing: cell biology and clinical management*, Wiley Publishing, Iowa, 1-31.
- Laskarides, C., 2016, Update on analgesic medication for adult and pediatric dental patients, *Dent Clin N Am*, 60:347–366.
- Leung, W.K., Corbet, E.F., Kan, K.W., Lo, E.C.M., Liu, J.K.S., 2005, A regimen of systematic periodontal care after removal of impacted mandibular third molars manages periodontal pockets associated with the mandibular second molars, *J Clin Periodontol*, 32:725–731.
- Liu, H., Chenyu W., Chen L., Yanguo Q, Zhonghan W., Fan Yang., Zuhao L., Jincheng, 2018, A functional chitosan-based hydrogel as a wound dressing and drug delivery system in the treatment of wound healing, *Journal The Royal Society of Chemistry* 8: 7533–7549
- Macintyre, P.E., Schug, S.A., Scott, D.A., Visser, E.J., Walker, S.M., 2010, Working Group of the Australian and New Zealand College of Anaesthetists and Faculty of Pain Medicine, *Acute Pain Management: Scientific Evidence*, 3rd ed, ANZCA & FPM, Melbourne, pp.1-34.
- Mappa T, Edy HJ, Kojong N, 2013. Formulasi Gel Ekstrak Daun Sasaladahan (*Peperomia pellucida* (L.) H.B.K.) dan Uji Efektivitasnya Terhadap Luka Bakar pada Kelinci (*Oryctolagus Cuniculus*). *Jurnal Ilmiah Farmasi* , *UNSRAT* (2) 2.

- Marwah, S., 2010, *Textbook of surgery for dental students*, Jaypee Brothers, New Delhi, pp: 59-66.
- McQuay, H.J., Derry, S., Eccleston, C., Wiffen, P.J., Moore, R.A., 2012, Evidence for analgesic effect in acute pain – 50 years on, *Pain*, 153:1364–1367.
- Mehra, P., Baran, S., 2006, Surgical management of impacted third molar teeth in Koerner, K.R. (ed.): *Manual of minor oral surgery for the general dentist*, Blackwell Munksgaard, Iowa, pp. 49-80.
- Miloro, M., Ghali, G.E., Larsen, P.E., Waite, P.D, 2004, Peterson’s Principle of Oral and Maxillofacial Surgery. 2nd ed., BC Decker Inc., Ontario, p.132.
- Moore, N.D., 2009, In search of an ideal analgesic for common acute pain, *Acute Pain*, 11:129-137.
- Morgan GE, Mikhail SE, Murray MJ.Pain management. In Morgan GE, Mikhail SE, Murray MJ editors. *Clinical anesthesiology 4th ed.*New York.Mc Graw Hill;2006.p. 359-71
- Nageshwar, 2002, Comma incision for impacted mandibular third molars, *J Oral Maxillofac Surg*, 60:1506-1509.
- Nazar, M.N., Puthiriraj, V., 2014, Analgesics following mandibular third molar surgery, *International Journal of Pharmaceutical and Clinical Research*, 6(1):13-19.
- Nwe N., Furuike T., Tamura H., 2011, *Production, properties and Applications of Fungi Cell Wall Polysaccharides: Chitosan and Glucan*. Springer-Verlag Berlin Heidelberg pp.187-208
- Osunde, O. D., Adebola, R. A., Saheeb, B. D., (2012), A comparative study of the effect of suture-less and multiple suture techniques on inflammatory complications following third molar surgery, *Int. J. Oral Maxillofac. Surg.* 41: 1275–1279.
- Pangestuti, R., Soon-Sun Bak, Se-Kwon Kim, 2011, Attenuation of pro-inflammatory mediators in LPS-stimulated BV2 microglia by chitooligosaccharides via the MAPK signaling pathway, *International Journal of Biological Macromolecules*, 49: 599–606
- Pell, G.J., Gregory, G.T., 1933, Impacted mandibular third molars: classification and modified technique for removal, *The Dental Digest*, 39 (9): 325-338.
- Peng, K.Y., Tseng, Y.C., Shen, E.C., Chiu, S.C., Fu, E., Huang, Y.W., 2001, Mandibular second molar periodontal status after third molar extraction, *J Periodontol*, 72: 1647-51.

- Peterson, L.J., 2011, *Contemporary Oral and Maxillofacial Surgery*, 4th ed, Mosby Co., St. Louis, pp: 156-213.
- Pitekova, L., Satko, I., Novotnakova, D., 2010, Complications after third molar surgery, *Bratisl Lek Listy.*; 111(5):296-8.
- Pogrel, M.A., Kahnberg, K., Andersson, L., 2014, *Essentials of oral and maxillofacial surgery*, John Wiley & Sons, Sussex, pp: 53-59.
- Polimeni, G., Xiropaidis, A.V., Wikesjö, U.M.E., 2006, Biology and principles of periodontal wound healing/regeneration, *Periodontology* 2000, 41:30–47.
- Pramono, D., Pranoto, A.E., 2014, Faktor Resiko Kejadian Komplikasi Pascaodontektomi Gigi Molar Ketiga Rahang Bawah Impaksi di RSGM Prof. Soedomo Yogyakarta, *Laporan Penelitian Dosen*, Fakultas Kedokteran Gigi Universitas Gadjah Mada, Yogyakarta.
- Pramono, D., 2015, Implementasi clinical practice guidelines dan luaran klinis odontektomi gigi molar tiga rahang bawah impaksi di RSGM Prof. Soedomo Yogyakarta, *Disertasi*, FK Universitas Gadjah Mada, Yogyakarta.
- Qiao, Y., Xue-F.B., Yu-Guang Du., 2011, Chitosan oligosaccharides protect mice from LPS challenge by attenuation of inflammation and oxidative stress, *International Immunopharmacology* 11 (2011) 121–127
- Rahmani, F., Moghadamnia, A. A., Kazemi, S., Shirzad, A., Motalebnejad, M., 2018, Effect of 0.5% Chitosan mouthwash on recurrent aphthous stomatitis: a randomized double-blind crossover clinical trial, *Electronic Physician (ISSN: 2008-5842)* Volume: 10, (6): 6912-6919
- Ryalat, S.T., Al-Shayyab, M.H., Marmash, A., Sawair, F.A., Baqain, Z.H., Khraisat A.S., 2011, The Effect of Alvogyl™ When Used As a Post Extraction Packing, *Jordan Journal of Pharmaceutical Sciences* (4): 2.
- Ren, Y.S., Malmstrom, H.S., 2007, Effectiveness of antibiotic prophylaxis in third molar surgery: a meta-analysis of randomized controlled clinical trials, *J Oral Maxillofac Surg*, 65(10):1909-1921.
- Rostiny., Mefina K., Ratri M., Sitalaksmi., Sherman S., 2014, Spirulina chitosan gel induction on healing process of Cavia cobaya post extraction socket., *Dent. J. (Maj. Ked. Gigi)*, 47, (1): 19–24
- Rodrigues, V.M., Vega R.B., Ramos Z.R., Saldaña K.D.A., Quiñones O.L.F., 2015, Chitosan and Its Potential Use as a Scaffold for Tissue Engineering in Regenerative Medicine, *BioMed Res Int*, Article ID 821279, 15 pages.
- Rubro-Palau, J., Garcia-Linares, J., Hueto-Madrid, J-A., González-Lagunas, J., Raspall-Martin, G., Mareque-Bueno, J., 2015, Effect of intra-alveolar placement of 0.2% chlorhexidine bioadhesive gel on the incidence of alveolar

osteitis following the extraction of mandibular third molars: a double-blind randomized clinical trial, *Med Oral Patol Oral Cir Bucal*, 20(1):117-122.

Saleh MR, 2013. Perbandingan Kadar Glikosaminoglikan dan Triterpene Glycoside pada Ekstrak Teripang Emas (*Stichopus hermannii*) dengan Pelarut Etanol (Polar) dan Heksana (Non Polar). *Thesis Universitas Hang Tuah Surabaya, Indonesia*, pp. 39-43

Sato, H., Takeda, Y., 2007, Proliferative activity, apoptosis, and histogenesis in the early stages of rat tooth extraction wound healing, *Cells Tissues Organs*, 186:104-111.

Samson. J., Destcroix. V., Torses. J.H., Blanchard.P., 2018, Recommendations for prescription of oral anti-inflammatory agents in oral surgery in adults, *médecine buccale chirurgie buccale*, 14:130-159.

Santosh, P., 2015, Impacted Mandibular Third Molars: Review of Literature and a Proposal of a Combined Clinical and Radiological Classification, *Ann Med Health Sci Res* ;5:229-34.

Scherstén, E., Lysell, L., Rohlin, M., 1989, Prevalence of impacted third molars in dental students, *Swed Dent J*, 13:7-13.

Sculean, A., Gruber, R., Bosshardt, D.D., 2014, Soft tissue wound healing around teeth and dental implants, *J Clin Periodontol*, 41(15): 6–22.

Setiawan. D, 2018, Pengaruh implantasi carbonate-hydroxyapatite kombinasi kolagen terhadap densitas tulang alveolar pada soket pasca pencabutan gigi Molar ketiga mandibula, *Thesis*, FK Universitas Gadjah Mada, Yogyakarta, pp. 62

Shepherd, J.P., Brickley, M., 1994, Surgical removal of third molar, *Br Med J*, 10:620-1.

Silbernagl dan Lang, 2000, Pain in Color Atlas of Pathophysiology, Thieme NewYork. pp. 320-32

Singh, Madhumati., Anindya Chakrabarty, 2014, Prevalence of Impacted Teeth: Study of 500 Patients, *International Journal of Science and Research (IJSR) ISSN (Online): 2319-7064*

Sjamsuhidajat, R & Wim, de Jong (ed). 2004. *Buku Ajar Ilmu Bedah*. Jakarta: EGC, pp. 234-236

Smith, L.A., Carroll, D., Edwards, J.E., 2000, Single-dose ketorolac and pethidine in acute postoperative pain: systematic review with meta-analysis, *Br J Anaesth*, 84(1): 48–58.

Stella, P.E., Falci, S.G., Oliveira de Medeiros, L.E., Douglas-de-Oliveira, D.W., Gonçalves, P.F., Flecha, O.D., Rocha dos Santos, C.R., 2017, Impact of

mandibular third molar extraction in the second molar periodontal status: A prospective study. *J Indian Soc Periodontol*, 21:285-90.

Sularsih., Soeprijanto., 2012., Perbandingan jumlah sel osteoblas pada penyembuhan luka antara penggunaan kitosan gel 1% dan 2%., *Jurnal Material Kedokteran Gigi*;1(2):145-152

Sularsih., Fitria,R., 2017., *Perbedaan penggunaan kitosan dengan berat molekul tinggi dan rendah terhadap ekspresi sel makrofag pada penyembuhan luka pencabutan gigi tikus rattus norvegicus.*, Departemen Ilmu Material Kedokteran Gigi, Fakultas Kedokteran Gigi Universitas Hang Tuah.

Susarla, S.M., Blaezer B.F., Magalnick D., 2003., Third molar surgery and associated complications. *Oral Maxillofacial Surg Clin N Am* 15 : 177–186

Suseno, E., Carrey, M., Jonathan, Y.E., Barus, J.F.A., Tanumihardja, T.N., 2017, Pencegahan Nyeri Kronis Pasca Operasi, *Majalah Kedokteran Andalas*, 40(1):40-51.

Syed, K.B ., Falah H K A., Abdul H A., Mohammad., Ismail M., Hussain S H Q., Mohammad S H., 2017., Assessment of Pain, Swelling and Trismus Following Impacted Third Molar Surgery Using Injection Dexamethasone Submucosally: A Prospective, Randomized, Crossover Clinical Study. *J Int Oral Health* :116–21

Szpaderska, A.M., DiPietro, L.A., 2005, Inflammation in surgical wound healing: friend or foe? *Surgery*, 137:571-573.

Talimkhani, I, Reza,M, Jamalpour, Babaei, H and Faradmal,,J, 2019, Comparison of intra-socket bupivacaine administration versus oral mefenamic acid capsule for postoperative pain management following removal of impacted mandibular third molars, *J Oral Maxillofac Surg* 77:1365-1370

Trombelli, L., Farina, R., Marzola, A., Bozzi, L., Liljenberg, B., Lindhe, J., 2008, Modeling and remodeling of human extraction socket, *J Clin Periodontol*, 35:630-639.

Tu, Jue., Yinglei Xu., Jianqin Xu., Yun Ling., Yueqin Cai., 2016, Chitosan nanoparticles reduce LPS-induced inflammatory reaction via inhibition of NF- γ B pathway in Caco-2 cells, *International Journal of Biological Macromolecules* 86 : 848–856

Vaishali, M.R., Roospashri, G., Davis, M.P., Indira, A.P., 2010, Trismus, *Indian Journal of Dental Advancements*, 2(3):303-307.

van der, M, W.J., Dijkstra, P.U., Visser, A., Vissink, A., Ren, Y., 2014, Reliability and validity of measurements of facial swelling with a stereophotogrammetry optical three-dimensional scanner, *Br J Oral and Maxillofac Surg*, 36:50-56

- Villafuerte-Nuñez, AE., Téllez-Anguiano AC., Hernández-Díaz, R. Rodríguez-Vera, J. A. Gutiérrez-Gnecchi, and J. L. Salazar-Martínez., 2012, Facial edema evaluation using digital image processing, *Hindawi publishing corporation discrete dynamics in nature and society*: 927843: 13
- Yamagushi, A., dan Sano, K., 2013, Effectiveness of preemptive analgesia on post operative pain following third molar surgery: review of literatures, *Japanese Dental Science Review*, 49:131-138.
- Yang, Eun-Jin., Jong-Gwan Kim, Ji-Young Kim, Seong Chul Kim, Nam Ho Lee, Chang-Gu Hyun, 2010, Anti-inflammatory effect of chitosan oligosaccharides in RAW 264.7 cells, *Cent. Eur. J. Biol.* : 5(1) 95–102
- Yao, K., Li, J., Yao, F., Yin, Y., 2012, *Chitosan-Based Hydrogels Function and Applications*, Taylor and Francis Group, Florida, pp. 39-45
- Yolcu, Ü., Acar, A.H., 2015, Comparison of a new flap design with the routinely used triangular flap design in third molar surgery, *Int J Oral Maxillofac Surg*, 44:1390-1397.