

REFERENCES

- [1] Trope M. Treatment of immature teeth with non-vital pulps and apical periodontitis. *Endodontic topics*. 2006;14(1):51-9.
- [2] Rafter M. Apexification: a review. *Dental Traumatology*. 2005;21(1):1-8.
- [3] Sheehy E, Roberts G. Use of calcium hydroxide for apical barrier formation and healing in non-vital immature permanent teeth: a review. *British dental journal*. 1997;183(7):241-6.
- [4] Giuliani V, Baccetti T, Pace R, Pagavino G. The use of MTA in teeth with necrotic pulps and open apices¹. *Dental Traumatology*. 2002;18(4):217-21.
- [5] Maroto M, Barbería E, Planells P, Vera V. Treatment of a non-vital immature incisor with mineral trioxide aggregate (MTA). *Dental Traumatology*. 2003;19(3):165-9.
- [6] Cvek M. Prognosis of luxated non-vital maxillary incisors treated with calcium hydroxide and filled with gutta-percha. A retrospective clinical study. *Dental Traumatology*. 1992;8(2):45-55.
- [7] Diogenes A, Henry MA, Teixeira FB, Hargreaves KM. An update on clinical regenerative endodontics. *Endodontic Topics*. 2013;28(1):2-23.
- [8] Iwaya Si, Ikawa M, Kubota M. Revascularization of an immature permanent tooth with apical periodontitis and sinus tract. *Dental Traumatology*. 2001;17(4):185-7.
- [9] Jeeruphan T, Jantararat J, Yanpiset K, Suwannapan L, Khewsawai P, Hargreaves KM. Mahidol study 1: comparison of radiographic and survival outcomes of immature teeth treated with either regenerative endodontic or apexification methods: a retrospective study. *Journal of endodontics*. 2012;38(10):1330-6.
- [10] Banchs F, Trope M. Revascularization of immature permanent teeth with apical periodontitis: new treatment protocol? *Journal of endodontics*. 2004;30(4):196-200.

- [11] Nosrat A, Homayounfar N, Oloomi K. Drawbacks and unfavorable outcomes of regenerative endodontic treatments of necrotic immature teeth: a literature review and report of a case. *Journal of endodontics*. 2012;38(10):1428-34.
- [12] Martin G, Ricucci D, Gibbs JL, Lin LM. Histological findings of revascularized/revitalized immature permanent molar with apical periodontitis using platelet-rich plasma. *Journal of endodontics*. 2013;39(1):138-44.
- [13] Wang X, Thibodeau B, Trope M, Lin LM, Huang GT. Histologic characterization of regenerated tissues in canal space after the revitalization/revascularization procedure of immature dog teeth with apical periodontitis. *Journal of endodontics*. 2010;36(1):56-63.
- [14] Thibodeau B, Teixeira F, Yamauchi M, Caplan DJ, Trope M. Pulp revascularization of immature dog teeth with apical periodontitis. *Journal of endodontics*. 2007;33(6):680-9.
- [15] Huang GT. Apexification: the beginning of its end. *International endodontic journal*. 2009;42(10):855-66.
- [16] Huang GT, Sonoyama W, Liu Y, Liu H, Wang S, Shi S. The hidden treasure in apical papilla: the potential role in pulp/dentin regeneration and bioroot engineering. *Journal of endodontics*. 2008;34(6):645-51.
- [17] Huang GT-J, Yamaza T, Shea LD, Djouad F, Kuhn NZ, Tuan RS, et al. Stem/progenitor cell-mediated de novo regeneration of dental pulp with newly deposited continuous layer of dentin in an in vivo model. *Tissue Engineering Part A*. 2009;16(2):605-15.
- [18] Chuensombat S, Khemaleelakul S, Chattipakorn S, Srisuwan T. Cytotoxic effects and antibacterial efficacy of a 3-antibiotic combination: an in vitro study. *Journal of endodontics*. 2013;39(6):813-9.
- [19] Phumpatrakom P, Srisuwan T. Regenerative capacity of human dental pulp and apical papilla cells after treatment with a 3-antibiotic mixture. *Journal of endodontics*. 2014;40(3):399-405.

- [20] Ruparel NB, Teixeira FB, Ferraz CC, Diogenes A. Direct effect of intracanal medicaments on survival of stem cells of the apical papilla. *Journal of endodontics*. 2012;38(10):1372-5.
- [21] Chen X, Bao ZF, Liu Y, Liu M, Jin XQ, Xu XB. Regenerative endodontic treatment of an immature permanent tooth at an early stage of root development: a case report. *Journal of endodontics*. 2013;39(5):719-22.
- [22] Kahler B, Mistry S, Moule A, Ringsmuth AK, Case P, Thomson A, et al. Revascularization outcomes: a prospective analysis of 16 consecutive cases. *Journal of endodontics*. 2014;40(3):333-8.
- [23] Huang X, Zhang J, Huang C, Wang Y, Pei D. Effect of intracanal dentine wettability on human dental pulp cell attachment. *International endodontic journal*. 2012;45(4):346-53.
- [24] Pang NS, Lee SJ, Kim E, Shin DM, Cho SW, Park W, et al. Effect of EDTA on attachment and differentiation of dental pulp stem cells. *Journal of endodontics*. 2014;40(6):811-7.
- [25] Ring KC, Murray PE, Namerow KN, Kuttler S, Garcia-Godoy F. The comparison of the effect of endodontic irrigation on cell adherence to root canal dentin. *Journal of endodontics*. 2008;34(12):1474-9.
- [26] Trevino EG, Patwardhan AN, Henry MA, Perry G, Dybdal-Hargreaves N, Hargreaves KM, et al. Effect of irrigants on the survival of human stem cells of the apical papilla in a platelet-rich plasma scaffold in human root tips. *Journal of endodontics*. 2011;37(8):1109-15.
- [27] Murray PE, Garcia-Godoy F, Hargreaves KM. Regenerative endodontics: a review of current status and a call for action. *Journal of endodontics*. 2007;33(4):377-90.
- [28] Ostby BN. The role of the blood clot in endodontic therapy. An experimental histologic study. *Acta Odontol Scand*. 1961;19:324-53.
- [29] Skoglund A, Tronstad L. Pulpal changes in replanted and autotransplanted immature teeth of dogs. *Journal of endodontics*. 1981;7(7):309-16.

- [30] Sheehy EC, Roberts GJ. Use of calcium hydroxide for apical barrier formation and healing in non-vital immature permanent teeth: a review. *Br Dent J.* 1997;183(7):241-6.
- [31] Trope M. Treatment of immature teeth with non-vital pulps and apical periodontitis. *Endodontic Topics.* 2006;14(1):51-9.
- [32] El-Meligy OA, Avery DR. Comparison of apexification with mineral trioxide aggregate and calcium hydroxide. *Pediatric dentistry.* 2006;28(3):248-53.
- [33] American Association of Endodontists. Considerations for a Regenerative procedure 2015. Available from:
http://www.aae.org/uploadedfiles/publications_and_research/research/currentregenerativeendodonticconsiderations.pdf.
- [34] Sato T, Hoshino E, Uematsu H, Kota K, Iwaku M, Noda T. Bactericidal Efficacy of a Mixture of Ciprofloxacin, Metronidazole, Minocycline and Rifampicin against Bacteria of Carious and Endodontic Lesions of Human Deciduous Teeth In Vitro. *Microbial Ecology in Health and Disease.* 1992;5(4):171-7.
- [35] Hoshino E, Kurihara-Ando N, Sato I, Uematsu H, Sato M, Kota K, et al. In-vitro antibacterial susceptibility of bacteria taken from infected root dentine to a mixture of ciprofloxacin, metronidazole and minocycline. *International endodontic journal.* 1996;29(2):125-30.
- [36] Sato I, Kurihara-Ando N, Kota K, Iwaku M, Hoshino E. Sterilization of infected root-canal dentine by topical application of a mixture of ciprofloxacin, metronidazole and minocycline in situ. *International endodontic journal.* 1996;29(2):118-24.
- [37] Windley W, Teixeira F, Levin L, Sigurdsson A, Trope M. Disinfection of immature teeth with a triple antibiotic paste. *Journal of endodontics.* 2005;31(6):439-43.
- [38] Löfmark S, Edlund C, Nord CE. Metronidazole is still the drug of choice for treatment of anaerobic infections. *Clinical infectious diseases.* 2010;50(Supplement 1):S16-S23.

- [39] Roche Y, Yoshimori R. In-vitro activity of spiramycin and metronidazole alone or in combination against clinical isolates from odontogenic abscesses. *Journal of Antimicrobial Chemotherapy*. 1997;40(3):353-7.
- [40] Wolfson JS, Hooper DC. The fluoroquinolones: structures, mechanisms of action and resistance, and spectra of activity in vitro. *Antimicrobial agents and chemotherapy*. 1985;28(4):581.
- [41] Chopra I, Roberts M. Tetracycline antibiotics: mode of action, applications, molecular biology, and epidemiology of bacterial resistance. *Microbiology and molecular biology reviews*. 2001;65(2):232-60.
- [42] Cehreli ZC, Isbitiren B, Sara S, Erbas G. Regenerative endodontic treatment (revascularization) of immature necrotic molars medicated with calcium hydroxide: a case series. *Journal of endodontics*. 2011;37(9):1327-30.
- [43] Chen MY, Chen KL, Chen CA, Tayebaty F, Rosenberg PA, Lin LM. Responses of immature permanent teeth with infected necrotic pulp tissue and apical periodontitis/abscess to revascularization procedures. *International endodontic journal*. 2012;45(3):294-305.
- [44] Yassen GH, Chu TM, Eckert G, Platt JA. Effect of medicaments used in endodontic regeneration technique on the chemical structure of human immature radicular dentin: an in vitro study. *Journal of endodontics*. 2013;39(2):269-73.
- [45] Sonoyama W, Liu Y, Yamaza T, Tuan RS, Wang S, Shi S, et al. Characterization of the apical papilla and its residing stem cells from human immature permanent teeth: a pilot study. *Journal of endodontics*. 2008;34(2):166-71.
- [46] Sonoyama W, Liu Y, Fang D, Yamaza T, Seo BM, Zhang C, et al. Mesenchymal stem cell-mediated functional tooth regeneration in swine. *PloS one*. 2006;1:e79.
- [47] Alberts B JA, Lewis J, Raff M, Roberts K, Walter P. *Molecular biology of the cell*. 4, editor2007.
- [48] Galler KM, D'Souza RN, Federlin M, Cavender AC, Hartgerink JD, Hecker S, et al. Dentin conditioning codetermines cell fate in regenerative endodontics. *Journal of endodontics*. 2011;37(11):1536-41.

- [49] Hynes RO, Yamada KM. Fibronectins: multifunctional modular glycoproteins. *The Journal of cell biology*. 1982;95(2 Pt 1):369-77.
- [50] Hynes RO. Cell adhesion: old and new questions. *Trends in Biochemical Sciences*. 1999;24(12):M33-M7.
- [51] Magnusson MK, Mosher DF. Fibronectin structure, assembly, and cardiovascular implications. *Arteriosclerosis, thrombosis, and vascular biology*. 1998;18(9):1363-70.
- [52] Yoshida N, Yoshida K, Iwaku M, Nakamura H, Ozawa H. A confocal laser scanning microscopic study of the immunofluorescent localization of fibronectin in the odontoblast layer of human teeth. *Archives of oral biology*. 1994;39(5):395-400.
- [53] Huang GT, Yamaza T, Shea LD, Djouad F, Kuhn NZ, Tuan RS, et al. Stem/progenitor cell-mediated de novo regeneration of dental pulp with newly deposited continuous layer of dentin in an in vivo model. *Tissue engineering Part A*. 2010;16(2):605-15.
- [54] Lovelace TW, Henry MA, Hargreaves KM, Diogenes A. Evaluation of the delivery of mesenchymal stem cells into the root canal space of necrotic immature teeth after clinical regenerative endodontic procedure. *Journal of endodontics*. 2011;37(2):133-8.
- [55] Lesot H, Begue-Kirn C, Smith AJ, Fausser JL, Ruch JV. [Cell-matrix interactions and odontoblast differentiation]. *C R Seances Soc Biol Fil*. 1992;186(5):485-500.
- [56] Ruch J. Patterned distribution of differentiating dental cells: facts and hypotheses. *Journal de biologie buccale*. 1990;18(2):91-8.
- [57] Mizuno M, Banzai Y. Calcium ion release from calcium hydroxide stimulated fibronectin gene expression in dental pulp cells and the differentiation of dental pulp cells to mineralized tissue forming cells by fibronectin. *International endodontic journal*. 2008;41(11):933-8.
- [58] Xu L, Tang L, Jin F, Liu XH, Yu JH, Wu JJ, et al. The apical region of developing tooth root constitutes a complex and maintains the ability to generate root and periodontium-like tissues. *Journal of periodontal research*. 2009;44(2):275-82.

- [59] Althumairy RI, Teixeira FB, Diogenes A. Effect of dentin conditioning with intracanal medicaments on survival of stem cells of apical papilla. *Journal of endodontics*. 2014;40(4):521-5.
- [60] Fields RD, Lancaster MV. Dual-attribute continuous monitoring of cell proliferation/cytotoxicity. *American biotechnology laboratory*. 1993;11(4):48-50.
- [61] O'Brien J, Wilson I, Orton T, Pognan F. Investigation of the Alamar Blue (resazurin) fluorescent dye for the assessment of mammalian cell cytotoxicity. *European journal of biochemistry / FEBS*. 2000;267(17):5421-6.
- [62] Page B, Page M, Noel C. A new fluorometric assay for cytotoxicity measurements in-vitro. *International journal of oncology*. 1993;3(3):473-6.
- [63] Yassen GH, Chu TM, Gallant MA, Allen MR, Vail MM, Murray PE, et al. A novel approach to evaluate the effect of medicaments used in endodontic regeneration on root canal surface indentation. *Clinical oral investigations*. 2014;18(6):1569-75.
- [64] Berkhoff JA, Chen PB, Teixeira FB, Diogenes A. Evaluation of triple antibiotic paste removal by different irrigation procedures. *Journal of endodontics*. 2014;40(8):1172-7.
- [65] Abbott PV, Heithersay GS, Hume WR. Release and diffusion through human tooth roots in vitro of corticosteroid and tetracycline trace molecules from Ledermix paste. *Endodontics & dental traumatology*. 1988;4(2):55-62.
- [66] Bjorvatn K, Skaug N, Selvig KA. Tetracycline-impregnated enamel and dentin: duration of antimicrobial capacity. *Scandinavian journal of dental research*. 1985;93(3):192-7.
- [67] Graham L, Cooper PR, Cassidy N, Nor JE, Sloan AJ, Smith AJ. The effect of calcium hydroxide on solubilisation of bio-active dentine matrix components. *Biomaterials*. 2006;27(14):2865-73.
- [68] Galler KM, Buchalla W, Hiller K-A, Federlin M, Eidt A, Schiefersteiner M, et al. Influence of Root Canal Disinfectants on Growth Factor Release from Dentin. *Journal of endodontics*. 2015;41(3):363-8.

- [69] Kalyva M, Papadimitriou S, Tziafas D. Transdental stimulation of tertiary dentine formation and intratubular mineralization by growth factors. International endodontic journal. 2010;43(5):382-92.
- [70] Melin M, Joffre-Romeas A, Farges J-C, Couble M-L, Magloire H, Bleicher F. Effects of TGF β 1 on dental pulp cells in cultured human tooth slices. Journal of dental research. 2000;79(9):1689-96.



ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่
Copyright© by Chiang Mai University
All rights reserved