Endodontic Recommended Reading List (October 2022)

A. ความรู้วิทยาศาสตร์พื้นฐาน

1. Gross, microscopic และ ultrastructural anatomy of soft and hard tissue (tooth and surrounding)

2. Embryology, histology, bone biology

3. Microbiology

4. Oral infection & immunology

5. Oral medicine, Oral pathology

6. Inflammation & healing

7. ชีวสถิติ

8. ความรู้กฎหมายวิชาชีพ เจตคติ และจรรยาบรรณแห่งวิชาชีพทันตกรรม

B. วิทยาศาสตร์การแพทย์ที่เกี่ยวข้องกับสาขา

1. Embryology, histology, physiology of pulp and periapical tissue

2. Biology of dental pulp

1. Bennett CG, Kelln EE, Biddington WR. Age changes of the vascular pattern of the human dental pulp. Arch Oral Biol. 1965;10(6):995-8.
2. Bernick S. Effect of aging on the nerve supply to human teeth. J Dent Res. 1967;46(4):694-9.
3. Bernick S. Lymphatic vessels of the human dental pulp. J Dent Res. 1977;56(1):70-7.
4. Brannstrom M. The hydrodynamic theory of dentinal pain: sensation in preparations, caries, and the dentinal crack syndrome. J Endod. 1986;12(10):453-7.

5. Brannstrom M, Linden LA, Johnson G. Movement of dentinal and pulpal fluid caused by clinical procedures. J Dent Res. 1968;47(5):679-82.
6. Byers MR, Neuhaus SJ, Gehrig JD. Dental sensory receptor structure in human teeth. Pain. 1982;13(3):221-35.
7. Carrigan PJ, Morse DR, Furst ML, Sinai IH. A scanning electron microscopic evaluation of human dentinal tubules according to age and location. J Endod. 1984;10(8):359-63.
8. DENTISTRY AAOP. Guideline on Pulp Therapy for Primary and Immature Permanent Teeth. Pediatr Dent. 2016;38(6):280-8.
9. Fitzgerald M, Chiego DJ, Jr., Heys DR. Autoradiographic analysis of odontoblast replacement following pulp exposure in primate teeth. Arch Oral Biol. 1990;35(9):707-15.
10. Fulling HJ, Andreasen JO. Influence of maturation status and tooth type of permanent teeth upon electrometric and thermal pulp testing. Scand J Dent Res. 1976;84(5):286-90.
11. Goodis HE, Winthrop V, White JM. Pulpal responses to cooling tooth temperatures. J Endod. 2000;26(5):263-7.
12. Hargreaves KM, Swift JQ, Roszkowski MT, Bowles W, Garry MG, Jackson DL. Pharmacology of peripheral neuropeptide and inflammatory mediator release. Oral Surg Oral Med Oral Pathol. 1994;78(4):503-10.
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14. Holland GR. The odontoblast process: form and function. J Dent Res. 1985;64 Spec No:499-514.
15. Johnsen DC. Innervation of teeth: qualitative, quantitative, and developmental assessment. J Dent Res. 1985;64 Spec No:555-63.
16. Kim S. Regulation of pulpal blood flow. J Dent Res. 1985;64 Spec No:590-6.
17. Kim S. Microcirculation of the dental pulp in health and disease. J Endod. 1985;11(11):465-71.
18. Kim S. Neurovascular interactions in the dental pulp in health and inflammation. J Endod. 1990;16(2):48-53.

19. Linde A. The extracellular matrix of the dental pulp and dentin. J Dent Res. 1985;64 Spec No:523-9.
20. Mangkornkarn C, Steiner JC. In vivo and in vitro glycosaminoglycans from human dental pulp. J Endod. 1992;18(7):327-31.
21. Murray PE, Matthews JB, Sloan AJ, Smith AJ. Analysis of incisor pulp cell populations in Wistar rats of different ages. Arch Oral Biol. 2002;47(10):709-15.
22. Murray PE, Stanley HR, Matthews JB, Sloan AJ, Smith AJ. Age-related odontometric changes of human teeth. Oral Surg Oral Med Oral Pathol Oral Radiol Endod. 2002;93(4):474-82.
23. Nair PN. Neural elements in dental pulp and dentin. Oral Surg Oral Med Oral Pathol Oral Radiol Endod. 1995;80(6):710-9.
24. Narhi M, Jyvasjarvi E, Virtanen A, Huopaniemi T, Ngassapa D, Hirvonen T. Role of intradental A- and C-type nerve fibres in dental pain mechanisms. Proc Finn Dent Soc. 1992;88 Suppl 1:507-16.
25. Okamura K, Kobayashi I, Matsuo K, Taniguchi K, Ishibashi Y, Izumi T, et al. Ultrastructure of the neuromuscular junction of vasomotor nerves in the microvasculature of human dental pulp. Arch Oral Biol. 1994;39(3):171-6.
26. Pashley DH. Mechanistic analysis of fluid distribution across the pulpodentin complex. J Endod. 1992;18(2):72-5.
27. Ruch JV. Odontoblast differentiation and the formation of the odontoblast layer. J Dent Res. 1985;64 Spec No:489-98.
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29. Takahashi K. Changes in the pulpal vasculature during inflammation. J Endod. 1990;16(2):92-7.
30. Takahashi K, Kishi Y, Kim S. A scanning electron microscope study of the blood vessels of dog pulp using corrosion resin casts. J Endod. 1982;8(3):131-5.
31. Torneck CD. Changes in the fine structure of the human dental pulp subsequent to carious exposure. J Oral Pathol. 1977;6(2):82-95.

32. Tranasi M, Sberna MT, Zizzari V, D'Apolito G, Mastrangelo F, Salini L, et al. Microarray evaluation of age-related changes in human dental pulp. J Endod. 2009;35(9):1211-7.
33. Tziafas D. Mechanisms controlling secondary initiation of dentinogenesis: a review. Int Endod J. 1994;27(2):61-74.
34. Wakisaka S. Neuropeptides in the dental pulp: distribution, origins, and correlation. J Endod. 1990;16(2):67-9.

3. Endo microbiology (related to caries & pulp-periapical tissue diseases)

1. Baumgartner JC, Watts CM, Xia T. Occurrence of Candida albicans in infections of endodontic origin. J Endod. 2000; 26(12): 695-8.
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6. Duggan JM, Sedgley CM. Biofilm formation of oral and endodontic Enterococcus faecalis. J Endod. 2007; 33(7): 815-8.
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8. Fabricius L, Dahlen G, Ohman AE, Moller AJ. Predominant indigenous oral bacteria isolated from infected root canals after varied times of closure. Scand J Dent Res. 1982; 90(2): 134-44.

9. Fouad AF. Endodontic Microbiology and Pathobiology: Current State of Knowledge. Dent Clin North Am. 2017; 61(1): 1-15.

10. Griffee MB, Patterson SS, Miller CH, Kafrawy AH, Newton CW. The relationship of Bacteroides melaninogenicus to symptoms associated with pulpal necrosis. Oral Surg Oral Med Oral Pathol. 1980; 50(5): 457-61.

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13. Hahn CL, Liewehr FR. Update on the adaptive immune responses of the dental pulp. J Endod. Jul 2007; 33(7):773-81.

14. José F. Siqueira Jr, PhD, and Isabela N. Rôças, PhD . Clinical Implications and Microbiology of Bacterial Persistence after Treatment Procedures. J Endod. Jan 2008; 34(11):1291.

15. Kakehashi S, Stanley HR, Fitzgerald RJ. The Effects of Surgical Exposures of Dental Pulps in Germ-Free and Conventional Laboratory Rats. Oral Surg Oral Med Oral Pathol. 1965; 20: 340-9.

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34. Sundqvist G, Figdor D, Persson S, Sjogren U. Microbiologic analysis of teeth with failed endodontic treatment and the outcome of conservative re-treatment. Oral Surg Oral Med Oral Pathol Oral Radiol Endod. Jan 1998; 85(1):86-93.

35. Sundqvist G, Figdor D. Life as an endodontic pathogen. Endod Topics. 2003; 6(1): 3-28.

36. Sundqvist G. Bacteriological studies of necrotic dental pulps. Umae Univ Odontological Dissertations. Jan 1976; No. 7, 1-93.

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39. Waltimo TMT, Haapasalo M, Zehnder M, Meyer J. Clinical aspects related to endodontic yeast infections. Endod Topics. 2004; 9(1): 66-78.

40. Xia T, Baumgartner JC. Occurrence of Actinomyces in infections of endodontic origin. J Endod. 2003; 29(9): 549-52.

4. Endo – Pharmacology

4.1 Analgesics

1. Cunningham CJ, Mullaney TP. Pain control in endodontics. Dent Clin North Am. 1992;36(2):393-408.
2. Jackson DL, Moore PA, Hargreaves KM. Preoperative nonsteroidal anti-inflammatory medication for the prevention of postoperative dental pain. J Am Dent Assoc. 1989;119(5):641-7.
3. Menhinick KA, Gutmann JL, Regan JD, Taylor SE, Buschang PH. The efficacy of pain control following nonsurgical root canal treatment using ibuprofen or a combination of ibuprofen and acetaminophen in a randomized, double-blind, placebo-controlled study. Int Endod J. 2004;37(8):531-41.

4.2 Antibiotics

1. A FF. Are antibiotics effective for endodontic pain? An evidence-based review. Endodontic Topics. 2002;3:52-66.
2. Baumgartner JC, Xia T. Antibiotic susceptibility of bacteria associated with endodontic abscesses. J Endod. 2003;29(1):44-7.
3. Endodontics and Antibiotics updated. AAE Endodontics: Colleagues for Excellence. Fall 2019

4.3 Local anesthesia mechanism

4.4 Drug interaction

5. Inflammation & healing (Pulp-periapical tissue)

6. Pathophysiology related to Pulp, periapical and orofacial pain

7. Diff Dx and Treatment of odontogenic and non-odontogenic diseases

C. ความรู้เฉพาะทางวิทยาเอ็นโดดอนต์

1. Radiographic technique & interpretation

1. Forsberg J, Halse A. Radiographic simulation of a periapical lesion comparing the paralleling and the bisecting-angle techniques. Int Endod J. 1994;27(3):133-8.
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2. Diagnosis & Tx planning

1. Abbott PV, Yu C. A clinical classification of the status of the pulp and the root canal system. Aust Dent J. 2007;52(1 Suppl):S17-31.
2. Bender IB, Landau MA, Fonsecca S, Trowbridge HO. The optimum placement-site of the electrode in electric pulp testing of the 12 anterior teeth. J Am Dent Assoc. 1989; 118(3): 305-10.
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10. Glickman GN, Bakland LK, Fouad AF, Hargreaves KM, Schwartz SA. Diagnostic terminology: report of an online survey. J Endod. 2009;35(12):1625-33.

11. Glickman GN. AAE Consensus Conference on Diagnostic Terminology: background and perspectives. J Endod. 2009;35(12):1619-20.

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13. Gutmann JL, Baumgartner JC, Gluskin AH, Hartwell GR, Walton RE. Identify and define all diagnostic terms for periapical/periradicular health and disease states. J Endod. 2009;35(12):1658-74.

14. Ingram TA, Peters DD. Evaluation of the effects of carbon dioxide used as a pulpal test. Part 2. In vivo effect on canine enamel and pulpal tissues. J Endod. 1983; 9(7): 296-303.

15. Levin LG, Law AS, Holland GR, Abbott PV, Roda RS. Identify and define all diagnostic terms for pulpal health and disease states. J Endod. 2009;35(12):1645-57.

16. Matthews B. Responses of intradental nerves to electrical and thermal stimulation of teeth in dogs. The Journal of Physiology. 1977; 264(3), 641–64.

17. Natkin E, Oswald RJ, Carnes LI. The relationship of lesion size to diagnosis, incidence, and treatment of periapical cysts and granulomas. Oral Surg Oral Med Oral Pathol. 1984; 57(1): 8294.

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26. Trowbridge HO, Franks M, Korostoff E, Emling R. Sensory response to thermal stimulation in human teeth. Journal of Endodontics.1980; 6(1), 405–12.

27. Van Hassel HJ, Harrington GW. Localization of pulpal sensation. Oral Surg Oral Med Oral Pathol. 1969; 28(5): 753-60.

3. Diff dx : Odontogenic vs Non odontogenic pain (Orofacial pain)

3.1 Non-odontogenic pain

1. Reny de Leeuw and Gary Klasser. Orofacial Pain: guidelines for assessment, diagnosis and management fifth edition 2013

4. Pain management (local anesthesia technique)

5. Vital pulp therapy

1. Aguilar P, Linsuwanont P. Vital pulp therapy in vital permanent teeth with cariously exposed pulp: a systematic review. J Endod. 2011; 37(5): 581-7.
2. Barthel CR, Rosenkranz B, Leuenberg A, Roulet JF. Pulp capping of carious exposures: treatment outcome after 5 and 10 years: a retrospective study. J Endod. 2000; 26(9): 525-8.
3. Bergenholtz G. Advances since the paper by Zander and Glass (1949) on the pursuit of healing methods for pulpal exposures: historical perspectives. Oral Surg Oral Med Oral Pathol Oral Radiol Endod. 2005; 100(2 Suppl): S102-8.
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5. Cohenca N, Paranjpe A, Berg J. Vital pulp therapy. Dent Clin North Am. 2013; 57(1): 59-73.
6. Cvek M, Cleaton-Jones PE, Austin JC, Andreasen JO. Pulp reactions to exposure after experimental crown fractures or grinding in adult monkeys. J Endod. 1982; 8(9): 391-7.
7. Cvek M. A clinical report on partial pulpotomy and capping with calcium hydroxide in permanent incisors with complicated crown fracture. J Endod. 1978; 4(8): 232-7.
8. Li Z, Cao L, Fan M, Xu Q. Direct Pulp Capping with Calcium Hydroxide or Mineral Trioxide Aggregate: A Meta-analysis. J Endod. 2015; 41(9): 1412-7.
9. Massler M, Pawlak J. The affected and infected pulp. Oral Surg Oral Med Oral Pathol. 1977; 43(6): 929-47.
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14.Mente J, Hufnagel S, Leo M, Michel A, Gehrig H, Panagidis D, et al. Treatment outcome of mineral trioxide aggregate or calcium hydroxide direct pulp capping: long-term results. J Endod. 2014; 40(11): 1746-51.

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18.Simon, S., Perard, M., Zanini, M. et al. Should pulp chamber pulpotomy be seen as a permanent treatment? Some preliminary thoughts. Int Endod J. 2013; 46: 79–87

19.Stanley HR. Pulp capping: conserving the dental pulp--can it be done? Is it worth it? Oral Surg Oral Med Oral Pathol. 1989; 68(5): 628-39.

20.Swift EJ, Trope M, Ritter AV. Vital pulp therapy for the mature tooth – can it work? Endod Topics. 2003; 5(1): 49-56.

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22.Witherspoon DE. Vital pulp therapy with new materials: Direction and treatment perspective-Permanent teeth. J Endod. 2008; 34: 525-8.

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6. Endodontic emergencies

1.Abbott AA, Koren LZ, Morse DR, Sinai IH, Doo RS, Furst ML. A prospective randomized trial on efficacy of antibiotic prophylaxis in asymptomatic teeth with pulpal necrosis and associated periapical pathosis. Oral Surg Oral Med Oral Pathol. 1988; 66(6): 722-33.

2.Alaçam T, Tinaz AC. Interappointment emergencies in teeth with necrotic pulps. J Endod. 2002; 28(5): 375-7.

3.Attar S, Bowles WR, Baisden MK, Hodges JS, McClanahan SB. Evaluation of pretreatment analgesia and endodontic treatment for postoperative endodontic pain. J Endod. 2008; 34(6): 652-5.

4.Ehrmann EH, Messer HH, Clark RM. Flare-ups in endodontics and their relationship to various medicaments. Aust Endod J. 2007; 33(3): 119-30.

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6.Hargreaves KM, Keiser K. New advances in the management of endodontic pain emergencies. J Calif Dent Assoc. 2004;32(6):469-73.

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9.Menhinick KA, Gutmann JL, Regan JD, Taylor SE, Buschang PH. The efficacy of pain control following nonsurgical root canal treatment using ibuprofen or a combination of ibuprofen and acetaminophen in a randomized, double-blind, placebo-controlled study. Int Endod J. 2004; 37(8):531-41.

10.Morse DR, Furst ML, Belott RM, Lefkowitz RD, Spritzer IB, Sideman BH. Infectious flare-ups and serious sequelae following endodontic treatment: a prospective randomized trial on efficacy of antibiotic prophylaxis in cases of asymptomatic pulpal-periapical lesions. Oral Surg Oral Med Oral Pathol. 1987; 64(1): 96-109.

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13.Oguntebi BR, DeSchepper EJ, Taylor TS, White CL, Pink FE. Postoperative pain incidence related to the type of emergency treatment of symptomatic pulpitis. Oral Surg Oral Med Oral Pathol. 1992; 73(4):479-83.

14.Paul RA. Endodontic pain. Endodontic Topics. 2014;30:75-98.

15.Pickenpaugh L, Reader A, Beck M, Meyers WJ, Peterson LJ. Effect of prophylactic amoxicillin on endodontic flare-up in asymptomatic, necrotic teeth. J Endod. 2001; 27(1): 53-6.

16.Rosenberg PA, Babick PJ, Schertzer L, Leung A. The effect of occlusal reduction on pain after endodontic instrumentation. J Endod. 1998; 24(7): 492-6.

17.Sathorn C, Parashos P, Messer H. The prevalence of postoperative pain and flare-up in single- and multiple-visit endodontic treatment: a systematic review. Int Endod J. 2008; 41(2): 91-9.

18.Seltzer S, Naidorf IJ. Flare-ups in endodontics: I. Etiological factors. J Endod. 2004; 30(7): 476-81.

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16. Management of medically compromised patient

17. Biomaterials related to endodontics

18. Dx & Tx of endo-perio involved teeth

18.1 Endo-Perio relationship

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19. Endo related topics : Ortho, perio, prosth, pedo

20. Regenerative endodontics

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