

## DAFTAR PUSTAKA

1. Berman LH, Hargreaves KM. Cohen's Pathways of the Pulp. 12th ed. Cohen's Pathways of the Pulp. Canada: Elsevier Health Sciences; 2021.
2. Mankoo T. Discussion: the ideal restoration of endodontically treated teeth: structural and esthetic considerations. *Eur J Esthet Dent.* 2013;8(2):269–77.
3. Rocca GT, Krejci I. Crown and post-free adhesive restorations for endodontically treated posterior teeth: from direct composite to endocrowns. *Eur J Esthet Dent.* 2013;8(2):156–79.
4. Dietschi D, Duc O, Krejci I, Sadan A. Biomechanical considerations for the restoration of endodontically treated teeth: a systematic review of the literature, Part II (Evaluation of fatigue behavior, interfaces, and in vivo studies). *Quintessence Int [Internet].* 2008;39(2):117–29. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/18560650>
5. Mangoush E, Garoushi S, Lassila L, Vallittu PK, Säilynoja E. Effect of fiber reinforcement type on the performance of large posterior restorations: a review of in vitro studies. *Polymers (Basel).* 2021;13(21):3682.
6. Belli S, Eraslan O, Eskitascioglu G. Direct Restoration of Endodontically Treated Teeth: a Brief Summary of Materials and Techniques. *Curr Oral Heal Reports.* 2015;2(4):182–9.
7. de Carvalho MA, Lazari PC, Gresnigt M, Del Bel Cury AA, Magne P. Current options concerning the endodontically-treated teeth restoration with the adhesive approach. *Braz Oral Res.* 2018;32(October):147–58.
8. Vallittu P, Özcan M. Clinical guide to principles of fiber-reinforced composites in dentistry. Woodhead Publishing; 2017.
9. Kaisarly D, Langenegger R, Litzenburger F, Heck K, El Gezawi M, Rösch P, et al. Effects of application method on shrinkage vectors and volumetric shrinkage of bulk-fill composites in class-II restorations. *Dent Mater [Internet].* 2022;38(1):79–93. Available from: <https://doi.org/10.1016/j.dental.2021.10.013>
10. Miletic V. Dental composite materials for direct restorations. Springer; 2018.
11. Valizadeh S, Omrani LR, Deliperi S, Mahounak FS. Case Report Restoration of a Nonvital Tooth with Fiber Reinforce Composite (Wallpapering Technique). 2020;2020.
12. Sáry T, Garoushi S, Braunitzer G, Alleman D, Volom A, Fráter M. Fracture behavior of MOD restorations reinforced by various fibre- reinforced techniques – an in vitro study Department of Operative and Esthetic Dentistry , Faculty of Dentistry , University of Szeged , Szeged , Hungary Department of Biomaterials Science. 2019;98(October):348–56.
13. Lukarcanin J, Sadikoğlu İS, Yaşa B, Türkün LŞ, Türkün M. Comparison of

- Different Restoration Techniques for Endodontically Treated Teeth. *Int J Biomater.* 2022;2022.
14. Deliperi S, Bardwell N, Coiana C. Reconstruction of Devital Teeth Using Direct Fiber-reinforced Composite Resins : A Case Report. 2005;7(2):165–71.
  15. Vallittu PK. High-aspect ratio fillers: Fiber-reinforced composites and their anisotropic properties. *Dent Mater [Internet].* 2015;31(1):1–7. Available from: <http://dx.doi.org/10.1016/j.dental.2014.07.009>
  16. Mangoush E, Säilynoja E, Prinssi R, Lassila L, Vallittu PK, Garoushi S. Comparative evaluation between glass and polyethylene fiber reinforced composites: A review of the current literature. *J Clin Exp Dent.* 2017;9(12):e1408–17.
  17. Deliperi S, Alleman D, Rudo D. Stress-reduced direct composites for the restoration of structurally compromised teeth: Fiber design according to the “wallpapering” technique. *Oper Dent.* 2017;42(3):233–43.
  18. Deliperi S, Bardwell DN. Reconstruction of nonvital teeth using direct fiber-reinforced composite resin: a pilot clinical study. *J Adhes Dent [Internet].* 2009;11(1):71–8. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/19343930>
  19. Özüdoğru S, Tosun G. Evaluation Of Microleakage And Fatigue Behaviour Of Several Fiber Application Techniques In Composite Restorations. *Ann Dent Spec.* 2022;10(2):60–6.
  20. Sengun A, Cobankara FK, Orucoglu H. Effect of a new restoration technique on fracture resistance of endodontically treated teeth. *Dent Traumatol.* 2008;24(2):214–9.
  21. Jakab A, Volom A, Sáry T, Vincze-Bandi E, Braunitzer G, Alleman D, et al. Mechanical Performance of Direct Restorative Techniques Utilizing Long Fibers for “Horizontal Splinting” to Reinforce Deep MOD Cavities—An Updated Literature Review. *Polymers (Basel).* 2022;14(7).
  22. Jiang W, Bo H, YongChun G, LongXing N. Stress distribution in molars restored with inlays or onlays with or without endodontic treatment: A three-dimensional finite element analysis. *J Prosthet Dent [Internet].* 2010;103(1):6–12. Available from: [http://dx.doi.org/10.1016/S0022-3913\(09\)60206-7](http://dx.doi.org/10.1016/S0022-3913(09)60206-7)
  23. Magne P. Efficient 3D finite element analysis of dental restorative procedures using micro-CT data. *Dent Mater.* 2007;23(5):539–48.
  24. Benazzi S, Kullmer O, Grosse IR, Weber GW. Using occlusal wear information and finite element analysis to investigate stress distributions in human molars. *J Anat.* 2011;219(3):259–72.
  25. Nishioka RS, de Vasconcellos LGO, Jóias RP, Rode S de M. Load-application devices: A comparative strain gauge analysis. *Braz Dent J.*

- 2015;26(3):258–62.
26. Kimble P, Corso AM, Beattie M, Campos MS, Cavalcanti B. Biomimetics and the restoration of the endodontically treated tooth. *Brazilian Dent Sci.* 2023;26(1).
  27. Milicich G, Rainey JT. Clinical presentations of stress distribution in teeth and the significance in operative dentistry. *Pract Periodontics Aesthet Dent.* 2000;12(7):695–701.
  28. Dietschi D, Duc O, Krejci I, Sadan A. Biomechanical considerations for the restoration of endodontically treated teeth: a systematic review of the literature--Part 1. Composition and micro- and macrostructure alterations. *Quintessence Int [Internet].* 2007;38(9):733–43. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/17873980>
  29. Ritter A V. Sturdevant's art & science of operative dentistry-e-book. Elsevier Health Sciences; 2017.
  30. Reeh ES, Messer HH, Douglas WH. Reduction in Tooth Stiffness as a Result of Endodontic and Restorative Procedures. 1989;15(11):512–6.
  31. El-Helali R, Dowling AH, McGinley EL, Duncan HF, Fleming GJP. Influence of resin-based composite restoration technique and endodontic access on cuspal deflection and cervical micoleakage scores. *J Dent [Internet].* 2013;41(3):216–22. Available from: <http://dx.doi.org/10.1016/j.jdent.2012.11.002>
  32. Garoushi S, Alleman D, Dentistry E, Lajos T. Fracture behaviour of MOD restorations reinforced by various fibre-reinforced techniques – An in vitro study. 2012;
  33. Rocca GT, Rizcalla N, Krejci I. Fiber-reinforced resin coating for endocrown preparations: A technical report. *Oper Dent.* 2013;38(3):242–8.
  34. Belli S, Eskitascioglu G. Biomechanical Properties and Clinical Use of a Polyethylene Fibre Post-Core Material. *Nternational Dent South Africa.* 2006;8(3):20–6.
  35. Brożek R, Koczorowski R, Dorocka-Bobkowska B. Laboratory and clinical evaluation of polymer materials reinforced by fibers used in dentistry. *Eur Rev Med Pharmacol Sci.* 2019;23(5):1855–63.
  36. Safwat EM, Khater AGA, Abd-Elsatar AG, Khater GA. Glass fiber-reinforced composites in dentistry. *Bull Natl Res Cent [Internet].* 2021;45(1). Available from: <https://doi.org/10.1186/s42269-021-00650-7>
  37. Ilday N, Seven N. The influence of different fiber-reinforced composites on shear bond strengths when bonded to enamel and dentin structures. *J Dent Sci.* 2011;6(2):107–15.
  38. Garoushi S, Säilynoja E, Vallittu PK, Lassila L. Physical properties and depth of cure of a new short fiber reinforced composite. *Dent Mater*

- [Internet]. 2013;29(8):835–41. Available from: <http://dx.doi.org/10.1016/j.dental.2013.04.016>
39. Zhang M, Matinlinna JP. E-Glass Fiber Reinforced Composites in Dental Applications. *Silicon*. 2012;4(1):73–8.
  40. Magne P, Milani T. Short-fiber Reinforced MOD Restorations of Molars with Severely Undermined Cusps. *J Adhes Dent* [Internet]. 2023;25(1):99–106. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/37097055>
  41. Abdulamir SW, Majeed MA. Fracture Resistance of Endodontically Treated Maxillary Premolar Teeth Restored with Wallpapering Technique : A Comparative In Vitro Study. 2023;2023.
  42. Akman S, Akman M, Eskitascioglu G, Belli S. Influence of several fibre-reinforced composite restoration techniques on cusp movement and fracture strength of molar teeth. *Int Endod J*. 2011;44(5):407–15.
  43. Bugalia A, Yujvender Y, Bramta N, Kharbanda J, Atri M, Kharbanda G. Effect of Placement Techniques, Flowable Composite , Liner and Fibre Inserts on Marginal Microlleakage of Class II Composite Restorations. *J Evid Based Med Healthc*. 2015;2(32):4779–87.
  44. Ahmed W, El-Badrawy W, Kulkarni G, Prakki A, El-Mowafy O. Gingival microlleakage of class V composite restorations with fiber inserts. *J Contemp Dent Pract*. 2013;14(4):622–8.
  45. Kaladevi M, Balasubramaniam R. Biomechanics in restorative dentistry. 2020;6(2):251–6.
  46. Halaçoglu DM, Yamanel K. The effects of different base materials on the stress distribution of the endodontically treated teeth: 3D FEA. *Cumhur Dent J*. 2019;22(1):56–65.
  47. Gibbs CH, Anusavice KJ, Young HM, Jones JS, Esquivel-Upshaw JF. Maximum clenching force of patients with moderate loss of posterior tooth support: A pilot study. *J Prosthet Dent*. 2002;88(5):498–502.
  48. Peters OA. The Guidebook to Molar Endodontics. Springer; 2016.
  49. Anusavice J K, Chiayi S, Rawls RH. Phillips's Science of Dental Material. 12th ed. Anusavice J K, Chiayi S, Rawls RH, editors. Elsevier Ltd; 2020.
  50. Yoon HG, Oh HK, Lee DY, Shin JH. 3-D Finite Element Analysis of the Effects of Post Location and Loading Location on Stress Distribution in Root Canals of the Mandibular 1St Molar. *J Appl Oral Sci*. 2018;26:1–10.
  51. Hu T, Cheng R, Shao M, Yang H, Zhang R, Gao Q, et al. Application of finite element analysis in root canal therapy. *Finite Elem Anal*. 2010;103:99–120.
  52. Magomedov IA, Khaliev MSU, Elmurzaev AA. Application of Finite Element Analysis in medicine. *J Phys Conf Ser*. 2020;1679(2).
  53. Budynas RG, Nisbett JK. *Shigley's Mechanical Engineering Design*. 2019;

54. Hibbeler R. Engineering Mechanics - Statics, R.C. Hibbeler, 12th Edition. 2020.
55. Garlapati TG, Krishnakadatta J, Natarasabapathy V. Fracture resistance of endodontically treated teeth restored with short fiber composite used as a core material—An in vitro study. *J Prosthodont Res* [Internet]. 2017;61(4):464–70. Available from: <http://dx.doi.org/10.1016/j.jpor.2017.02.001>
56. Belli S, Erdemir A, Yildirim C. Reinforcement effect of polyethylene fibre in root-filled teeth: Comparison of two restoration techniques. *Int Endod J*. 2006;39(2):136–42.
57. Plotino G. Minimally invasive approaches in endodontic practice. Springer Nature; 2020.
58. Celikten B, Koohnavard M, Oncu A, Sevimay FS, Orhan AI, Orhan K. A new perspective on minimally invasive endodontics: a systematic review. *Biotechnol Biotechnol Equip* [Internet]. 2021;35(1):1758–67. Available from: <https://doi.org/10.1080/13102818.2021.2014966>
59. Suksaphar W, Banomyong D, Jirathanyanatt T, Ngoenwiwatkul Y. Survival rates against fracture of endodontically treated posterior teeth restored with full-coverage crowns or resin composite restorations: a systematic review. *Restor Dent Endod*. 2017;42(3):157.
60. Bhalla VK, Chockattu SJ, Srivastava S, Prasad S. Decision making and restorative planning for adhesively restoring endodontically treated teeth: An update. *Saudi Endod J*. 2020;10(3):181–6.
61. Barcelos L, Bicalho A, Verissimo C. Stress Distribution , Tooth Remaining Strain , and Fracture Resistance of Endodontically Treated Molars Restored Without or With One or Two Fiberglass Posts And Direct Composite Resin. 2018;(May).
62. Cheron RA, Marshall SJ, Goodis HE, Peters OA. Nanomechanical Properties of Endodontically Treated Teeth. *J Endod* [Internet]. 2011;37(11):1562–5. Available from: <http://dx.doi.org/10.1016/j.joen.2011.08.006>
63. Prabhakar AR, Shrikant LN, Nadig B. Stress Analysis in Maxillary Incisor Following Fragment Reattachment : A Finite Element Analysis. 2016;7–13.
64. Zhu J, Rong Q, Wang X, Gao X. Influence of remaining tooth structure and restorative material type on stress distribution in endodontically treated maxillary premolars: A finite element analysis. *J Prosthet Dent* [Internet]. 2017;117(5):646–55. Available from: <http://dx.doi.org/10.1016/j.prosdent.2016.08.023>
65. Chang J, Lee IB, Cho BH, Kim H-Y, Son HH. Comparison of the elastic modulus among three dentin adhesives before and after thermocycling. *J Korean Acad Conserv Dent*. 2008;33(1):45.

66. Pinna R, Usai P, Arrica M, Milia E. Effectiveness of two self-etchings bonded clinically in caries affected dentin with homogeneous smear layer. *J Nanomater.* 2015;2015(January).
67. Van Landuyt KL, Kanumilli P, De Munck J, Peumans M, Lambrechts P, Van Meerbeek B. Bond strength of a mild self-etch adhesive with and without prior acid-etching. *J Dent.* 2006;34(1):77–85.
68. Paul J, Chakravarthy Y, Kumar S, Rahna R. Comparative Evaluation of the Bonding Efficacy of Sixth, Seventh and Eighth Generation Bonding Agents: an in Vitro Study. *Int Res J Pharm.* 2013;2(9):143–7.
69. Sadr A, Bakhtiari B, Hayashi J, Luong MN, Chen YW, Chyz G, et al. Effects of fiber reinforcement on adaptation and bond strength of a bulk-fill composite in deep preparations. *Dent Mater.* 2020;36(4):527–34.
70. Tezvergil-Mutluay A, Lassila LVJ, Vallittu PK. Microtensile bond strength of fiber-reinforced composite with semi-interpenetrating polymer matrix to dentin using various bonding systems. *Dent Mater J.* 2008;27(6):821–6.
71. Rodrigues M de P, Soares PBF, Gomes MAB, Pereira RA, Tantbirojn D, Versluis A, et al. Direct resin composite restoration of endodontically-treated permanent molars in adolescents: Bite force and patient-specific finite element analysis. *J Appl Oral Sci.* 2020;28:1–11.
72. Bicalho AA, Tantbirojn D, Versluis A, Soares CJ. Effect of occlusal loading and mechanical properties of resin composite on stress generated in posterior restorations. *Am J Dent.* 2014;27(3):129–33.
73. Aliaga J, Caro M RS, Hermoza Novoa M. Stress Distribution in Occlusal Veneers with Different Finish Lines When Applying Vertical and Tangential Forces. *Odovtos - Int J Dent Sci.* 2022;24(3):103–14.
74. Bommanagoudar J, Chandrashekhar S, Sharma S, Jain H. Comparison of enamel preparations-bevel, chamfer and stair step chamfer on fracture resistance of nano filled resin composites using bulk pack technique-an in vitro study. *Open Access Maced J Med Sci.* 2019;7(23):4089–93.
75. Kishen A. Biomechanics of fractures in endodontically treated teeth. *Endod Top.* 2015;33(1):3–13.
76. Sfeikos T, Dionysopoulos D, Kouros P, Naka O, Tolidis K. Effect of a fiber-reinforcing technique for direct composite restorations of structurally compromised teeth on marginal microleakage. Vol. 34, *Journal of Esthetic and Restorative Dentistry.* 2022. p. 650–60.
77. El-Mowafy O, El-Badrawy W, Eltawy A, Abbasi K, Habib N. Gingival microleakage of class II resin composite restorations with fiber inserts. *Oper Dent.* 2007;32(3):298–305.