

DAFTAR PUSTAKA

1. Mannocci F, Bhuva B, Roig M, Zarow M, Bitter K, Dummer PMH, et al. European Society of Endodontology position statement: The restoration of root filled teeth. *Int Endod J*. 2021;54(11):1974–81.
2. Atlas A, Grandini S, Martignoni M. Evidence-based treatment planning for the restoration of endodontically treated single teeth: importance of coronal seal, post vs no post, and indirect vs direct restoration. *Quintessence Int* [Internet]. 2019;50(10):772–81. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/31559397>
3. Afrashtehfar KI, Ahmadi M, Emami E, Abi-Nader S, Tamimi F. Failure of single-unit restorations on root filled posterior teeth: a systematic review. *Int Endod J*. 2017;50(10):951–66.
4. 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.
5. Shu X, Mai Q-Q, Blatz M, Price R, Wang X-D, Zhao K. Direct and Indirect Restorations for Endodontically Treated Teeth: A Systematic Review and Meta-analysis, IAAD 2017 Consensus Conference Paper. *J Adhes Dent* [Internet]. 2018;20(3):183–94. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/29984369>
6. Daher R, Feilzer AJ, Krejci I. Novel non-invasive reinforcement of MOD cavities on endodontically treated teeth. *J Dent* [Internet]. 2016;54:77–85. Available from: <http://dx.doi.org/10.1016/j.jdent.2016.09.008>
7. 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.
8. Tekla S, Vincze-bandi E, Braunitzer G, Alleman D. Mechanical Performance of Direct Restorative Techniques Utilizing Long Fibers for “ Horizontal Splinting ” to Reinforce Deep MOD Cavities — An Updated Literature Review. 2022;
9. Seo D, Yi Y, Shin S. Analysis of Factors Associated with Cracked Teeth. *J Endod* [Internet]. 2012;38(3):288–92. Available from: <http://dx.doi.org/10.1016/j.joen.2011.11.017>
10. Kumar A, Tekriwal S, Rajkumar B, Gupta V, Rastogi R. A Review on Fibre Reinforced Composite Resins. *Ann Prosthodont Restor Dent*. 2016;2(1):11–6.

11. Sáry T, Garoushi S, Braunitzer G, Alleman D, Volom A, Fráter M. Fracture behaviour of MOD restorations reinforced by various fibre-reinforced techniques – An in vitro study. *J Mech Behav Biomed Mater* [Internet]. 2019;98(May):348–56. Available from: <https://doi.org/10.1016/j.jmbbm.2019.07.006>
12. 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. 2021;1–12.
13. 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.
14. Zelic K, Vukicevic A, Jovicic G, Aleksandrovic S, Filipovic N, Djuric M. Mechanical weakening of devitalized teeth: three-dimensional Finite Element Analysis and prediction of tooth fracture. 2014;1–14.
15. Frankenberger R, Zeilinger I, Krech M, Mörig G, Naumann M, Braun A, et al. Stability of endodontically treated teeth with differently invasive restorations: Adhesive vs. non-adhesive cusp stabilization. *Dent Mater* [Internet]. 2015;31(11):1312–20. Available from: <http://dx.doi.org/10.1016/j.dental.2015.08.160>
16. Daher E, Rahme AZ, Wehbe T, Khoury CK El, Badr C, Daou M. Study by finite elements of stress distribution by comparing behaviour of 2 types of composite. *Int J Dent Oral Sci*. 2021;8(2):1431–6.
17. Aida N, Shinya A, Yokoyama D, Lassila LVJ, Gomi H, Vallittu PK, et al. Three-dimensional finite element analysis of posterior fiber-reinforced composite fixed partial denture Part 2: Influence of fiber reinforcement on mesial and distal connectors. *Dent Mater J*. 2011;30(1):29–37.
18. Sevimay M, Özyılmaz ÖY, Eraslan O. Stress distribution in endodontically treated maxillary central incisor restored with different post and crown materials. 2015;13–9.
19. Elsharkawy D, Attia M. Finite Element Analysis of Stress Distribution in Weakened Teeth Restored With Different Post Core Materials. *Egypt Dent J*. 2018;64(4):3957–63.
20. Berman LH, Hargreaves KM. *Cohen’s Pathway of the Pulp* 12th ed. 2021. 1–3488 p.
21. Kishen A. Biomechanics of fractures in endodontically treated teeth. *Endod Top*. 2015;33(1):3–13.
22. Barcelos LM, Bicalho AA, Veríssimo C, Rodrigues MP, Soares CJ. 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. *Oper Dent.* 2017;42(6):646–57.
23. Chun KJ, Choi HH, Lee JY. Comparison of mechanical property and role between enamel and dentin in the human teeth. *J Dent Biomech.* 2014;5(1):1–7.
 24. Mazumdar P, Choudhury SR. Moisture Analysis of Endodontically Treated and Sound Teeth Using Moisture Analyser and Indirect Gravimetric Analysis. *J Evol Med Dent Sci.* 2020;9(49):3721–5.
 25. Valian A, Moravej-salehi E, Geramy A, Faramarzi E. Effect of Extension and Type of Composite-Restored Class II Cavities on Biomechanical Properties of Teeth: A Three Dimensional Finite Element Analysis. 2015;140–50.
 26. Mannocci F, Cowie J. Restoration of endodontically treated teeth. *Br Dent J.* 2014;216(6):341–6.
 27. Bahari M, Mohammadi N, Kimyai S, Kahnemoui MA, Vahedpour H, Mohammadi Torkani MA, et al. Effect of Different Fiber Reinforcement Strategies on the Fracture Strength of Composite Resin Restored Endodontically Treated Premolars. *Pesqui Bras Odontopediatria Clin Integr.* 2019;19(1).
 28. Miletic V. Dental Composite Materials for Direct Restorations. *Dental Composite Materials for Direct Restorations.* 2018. 11–59 p.
 29. Lukarcanin J, Sadikoğlu İS, Yaşa B, Türkün LŞ, Türkün M. Comparison of Different Restoration Techniques for Endodontically Treated Teeth. *Int J Biomater.* 2022;2022.
 30. 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. 2017;9(12):1408–17.
 31. Rocca GT, Saratti CM, Cattani-Lorente M, Feilzer AJ, Scherrer S, Krejci I. The effect of a fiber reinforced cavity configuration on load bearing capacity and failure mode of endodontically treated molars restored with CAD/CAM resin composite overlay restorations. *J Dent [Internet].* 2015;43(9):1106–15. Available from: <http://dx.doi.org/10.1016/j.jdent.2015.06.012>
 32. Vallittu P, Ozcan M. *Clinical Guide to Principles of Fiber-Reinforced Composite in dentistry.* Cambridge: Woodhead Publishing Series in Biomaterials; 2017. 16–20 p.
 33. Belli S, Eskitascioglu G. Biomechanical material properties and clinical use

- of a polyethylene fibre post - core material. *Int Dent South Africa*. 2006;8(3).
34. Kemalolu H, Emin Kaval M, Turkun M, Micoogullari Kurt S. Effect of novel restoration techniques on the fracture resistance of teeth treated endodontically: An in vitro study. *Dent Mater J*. 2015;34(5):618–22.
 35. 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.
 36. Saquib S, Abdullah AQ, Gotam D, Talib N, Muhammad S, Sultana AH. Comparative evaluation of flexural strength and flexural modulus of different periodontal splint materials: An in vitro study. *Appl Sci*. 2019;9(19):1–10.
 37. Shen C, Rawls HR, Esquivel-upshaw JF. *Phillips' Science of Dental Materials 13th Edition*. Elsevier; 2022.
 38. Deliperi S. Functional and aesthetic guidelines for stress-reduced direct posterior composite restorations. *Oper Dent*. 2012;37(4):425–31.
 39. Kaladevi M, Balasubramaniam R. Biomechanics in restorative dentistry. 2020;6(2):251–6.
 40. Milicich G, Rainey JT. Clinical presentations of stress distribution in teeth and the significance in operative dentistry. *Pract Periodontics Aesthet Dent*. 2000;12(7).
 41. Magne P. Efficient 3D finite element analysis of dental restorative procedures using micro-CT data. *Dent Mater*. 2007;23(5):539–48.
 42. Perez-Gonzalez A, Gonzalez-Lluch C, L. J, J. P, L. J. Biomechanical Models of Endodontic Restorations. *Theor Biomech*. 2011;(November).
 43. Meira JBC, Jikihara AN, Capetillo P, Roscoe MG, Cattaneo PM, Ballester, et al. Finite Element Analysis in Biomaterials. *Biomater Mech*. 2017;(December):187–96.
 44. Bandela V, Kanaparthi S. *Finite Element Analysis and Its Applications in Dentistry*. Finite Elem Methods Their Appl. 2021;
 45. Nagasiri R, Chitmongkolsuk S. Long-term survival of endodontically treated molars without crown coverage: A retrospective cohort study. *J Prosthet Dent*. 2005;93(2):164–70.
 46. Maravić T, Comba A, Mazzitelli C, Bartoletti L, Balla I, di Pietro E, et al. Finite element and in vitro study on biomechanical behavior of

- endodontically treated premolars restored with direct or indirect composite restorations. *Sci Rep* [Internet]. 2022;12(1):1–11. Available from: <https://doi.org/10.1038/s41598-022-16480-0>
47. Ruprai S, Shin S, Dang J, Vijay H, Freitas C. Biomimetic Approach in Tooth Conservation and Fracture Resistance: A Short Descriptive Review of Current Biomaterials and Techniques. *Int J Oral Heal*. 2022;2(1).
 48. 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).
 49. Navimipour EJ, Firouzmandi M, Mirhashemi FS. Finite Element Analysis of the Endodontically-treated Maxillary Premolars restored with Composite Resin along with Glass Fiber Insertion in Various Positions. *J Contemp Dent Pract*. 2015;16(4):284–90.
 50. Aggarwal V, Singla M, Miglani S, Sharma V, Kohli S. Effect of polyethylene fiber reinforcement on marginal adaptation of composite resin in Class II preparations. *Gen Dent*. 2018;66(6):E6–10.
 51. Safwat EM, Khater AGA, Elsatar AGA, Khater GA. Glass fiber - reinforced composites in dentistry. *Bull Natl Res Cent* [Internet]. 2021; Available from: <https://doi.org/10.1186/s42269-021-00650-7>
 52. 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.
 53. Rachmawati CA. Gambaran Distribusi Tegangan pada Gigi Setelah Perawatan Saluran Akar Antara Preparasi Akses TEC, CEC, TREC, dan NEC dengan Menggunakan Metode Elemen Hingga. Universitas Padjadjaran; 2020.
 54. 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>
 55. Elkholy MMA, Nawar NN, Ha WN, Saber SM, Kim HC. Impact of Canal Taper and Access Cavity Design on the Life Span of an Endodontically Treated Mandibular Molar: A Finite Element Analysis. *J Endod* [Internet]. 2021;47(9):1472–80. Available from: <https://doi.org/10.1016/j.joen.2021.06.009>
 56. Asopa S, Mandava J, Chalasani U, Anwarullah A, Ravi R. Fracture

- resistance of endodontically treated molars restored with resin composites. *Indian J Conserv Endod.* 2017;2(3):89–97.
57. Halaçoğlu 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.
 58. Prabhakar A, Shrikant L, Nadig B. Stress analysis in maxillary incisor following fragment reattachment: A finite element analysis. *J Dent Allied Sci.* 2016;5(1):7.
 59. Landys Borén D, Jonasson P, Kvist T. Long-term survival of endodontically treated teeth at a public dental specialist clinic. *J Endod.* 2015;41(2):176–81.
 60. 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.
 61. Nair M, Paul J, Kumar, Satheesh Chakravarthy Y, Krishna V, Shivaprasad. Comparative evaluation of the bonding efficacy of sixth and seventh generation bonding agents: An In-Vitro study. *J Conserv Dent [Internet].* 2014;17(1):27–30. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3915380/?report=reader>
 62. 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 [Internet].* 2020;36(4):527–34. Available from: <https://doi.org/10.1016/j.dental.2020.01.007>
 63. 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.
 64. Chen B, Ma Y, Wu K, Chen H, Li L, Liang L, et al. Influence of various materials on biomechanical behavior of endocrown-restored, endodontically-treated mandibular first molar: A 3D-finite element analysis. *J Wuhan Univ Technol Mater Sci Ed.* 2015;30(3):643–8.
 65. Perdigão J. Restoration of Root Canal-Treated Teeth. *Restoration of Root Canal-Treated Teeth.* 2016.
 66. Hasanah PU, Agustiono P, Widjijono. Fiber Dengan Braided Fiber Pada Fiber Reinforced. 2014;3(1):18–21.
 67. Metal T, Implant D. *Scientific Compendium.* :1–24.
 68. Firda AZ. Pengaruh aplikasi fiber braided polyethylene terhadap kekuatan tekan resin komposit nanofil. Universitas Muhammadiyah Surakarta. 2016.

69. Rosyida NF, Sunarintyas S, Pudyani PS. The effect of silanated and impregnated fiber on the tensile strength of E-glass fiber reinforced composite retainer. *Dent J (Majalah Kedokt Gigi)*. 2015;48(1):22.
70. Zupanc J, Vahdat-Pajouh N, Schäfer E. New thermomechanically treated NiTi alloys – a review. *Int Endod J*. 2018;51(10):1088–103.
71. Hajira NSWN, Mehta D, HI U. *Biomechanics in Restorative Dentistry*. Saarbrücken: LAP LAMBERT Academic Publishing; 2015. 7–10 p.
72. Eapen AM, Amirtharaj LV, Sanjeev K, Mahalaxmi S. Fracture Resistance of Endodontically Treated Teeth Restored with 2 Different Fiber-reinforced Composite and 2 Conventional Composite Resin Core Buildup Materials: An In Vitro Study. *J Endod [Internet]*. 2017;43(9):1499–504. Available from: <http://dx.doi.org/10.1016/j.joen.2017.03.031>
73. Abdulmir SW, Majeed MA. Fracture Resistance of Endodontically Treated Maxillary Premolar Teeth Restored with Wallpapering Technique: A Comparative in Vitro Study. *Int J Dent*. 2023;2023.
74. Atiyah AH, Baban L. Fracture resistance of endodontically treated premolars with extensive MOD cavities restored with different composite restorations (An In vitro study). *J Baghdad Coll Dent [Internet]*. 2014;26:7–15. Available from: <https://www.semanticscholar.org/paper/Fracture-resistance-of-endodontically-treated-with-Atiyah-Baban/a5b7499de88d85fedaa23d329c17d8549e2da463>
75. Soares PV, Santos-Filho PCF, Queiroz EC, Araújo TC, Campos RE, Araújo CA, et al. Fracture resistance and stress distribution in endodontically treated maxillary premolars restored with composite resin. *J Prosthodont*. 2008;17(2):114–9.
76. Eliguzeloglu Dalkiliç E, Kazak M, Hisarbeyli D, Fildisi MA, Donmez N, Deniz Arisu H. Can fiber application affect the fracture strength of endodontically treated teeth restored with a low viscosity bulk-fill composite? *Biomed Res Int*. 2019;2019.
77. Roma M, Miglani S, Sureshchandra B. Fracture resistance of class ii (mod) restorations: influence of restorative technique and bevel preparation” – an in vitro study. *Int J Adv Res*. 2016;65(1):805–18.
78. Belli S, Dönmez N, Eskitaşcioğlu G. The effect of c-factor and flowable resin or fiber use at the interface on microtensile bond strength to dentin. *J Adhes Dent [Internet]*. 2006;8(4):247–53. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/16958290>
79. Chandrasekaran N, Ramachandran AK, Vincent JC. Bond Strength in

Adhesive Dentistry- A Narrative Review Abstract : 2022;21(11):58–62.

80. El-Mowafy O, El-Badrawy W, Eltanty A, Abbasi K, Habib N. Gingival microleakage of class II resin composite restorations with fiber inserts. *Oper Dent.* 2007;32(3):298–305.

