

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. Baruah S, Nair C, Kanaujia S, Joshi R. Review Article The Advent of the Compression Dome Concept. 2020;11(2).
3. Eliyas S, Jalili J, Martin N. Restoration of the root canal treated tooth. Br Dent J. 2015;218(2):53–62.
4. Morimoto S, Lia WKC, Gonçalves F, Nagase DY, Gimenez T, Raggio DP, et al. Risk factors associated with cusp fractures in posterior permanent teeth—a cross-sectional study. Appl Sci. 2021;11(19):1–12.
5. Marvaniya J, Agarwal K, Mehta DN, Parmar N, Shyamal R, Patel J. Minimal Invasive Endodontics: A Comprehensive Narrative Review. Cureus. 2022;14(6).
6. Udoye CI, Sede MA, Jafarzadeh H. The pattern of fracture of endodontically treated teeth. Trauma Mon. 2014;19(4):39–40.
7. Dejak B, Młotkowski A, Romanowicz M. Finite element analysis of stresses in molars during clenching and mastication. J Prosthet Dent. 2003;90(6):591–7.
8. Sadaf D. Survival rates of endodontically treated teeth after placement of definitive coronal restoration: 8-year retrospective study. Ther Clin Risk Manag. 2020;16:125–31.
9. Chotvorrarak K, Suksaphar W, Banomyong D. Retrospective study of fracture survival in endodontically treated molars: the effect of single-unit crowns versus direct-resin composite restorations. Restor Dent Endod. 2021;46(2):1–11.
10. 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.
11. Valizadeh S, Ranjbar Omrani L, Deliperi S, Sadeghi Mahounak F. Restoration of a Nonvital Tooth with Fiber Reinforce Composite (Wallpapering Technique). Case Rep Dent. 2020;2020.
12. Zheng Z, Sun J, Jiang L, Wu Y, He J, Ruan W, et al. Influence of margin design and restorative material on the stress distribution of endocrowns: a 3D finite element analysis. BMC Oral Health [Internet]. 2022;22(1):1–12.

13. Visser HJ, Brandt PD. Fracture behaviour patterns of cusp-replacing fibre strengthened composite restorations. *South African Dent J.* 2015;70(9)
14. Tanner J, Tolvanen M, Garoushi S, Säilynoja E. Clinical Evaluation of Fiber-Reinforced Composite Restorations in Posterior Teeth - Results of 2.5 Year Follow-up. *Open Dent J.* 2018;12(1):476–85.
15. Gaintantzopoulou MD, Farmakis ET, Eliades GC. Effect of Load Cycling on the Fracture Strength/Mode of Teeth Restored with FRC Posts or a FRC Liner and a Resin Composite. *Biomed Res Int.* 2018;2018.
16. Lukarcanin J, Sadikoğlu İS, Yaşa B, Türkün LŞ, Türkün M. Comparison of Different Restoration Techniques for Endodontically Treated Teeth. *Int J Biomater.* 2022;2022.
17. Shah EH, Shetty P, Aggarwal S, Sawant S, Shinde R, Bhol R. Effect of fibre-reinforced composite as a post-obturation restorative material on fracture resistance of endodontically treated teeth: A systematic review. *Saudi Dent J [Internet].* 2021;33(7):363–9. Available from: <https://doi.org/10.1016/j.sdentj.2021.07.006>
18. Ahmed W, El-Badrawy W, Kulkarni G, Prakki A, El-Mowafy O. Gingival microleakage of class V composite restorations with fiber inserts. *J Contemp Dent Pract.* 2013;14(4):622–8.
19. 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):1–12.
20. Perdigão J. Restoration of Root Canal-Treated Teeth. *Restoration of Root Canal-Treated Teeth.* 2016.
21. Beltagy TM. Invisible reinforcement of uncomplicated coronal fracture using two different fiber-reinforced composites: in-vitro and in-vivo study. *Tanta Dent J.* 2018;15:91–8.
22. 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>
23. Kessler O. Introduction to the forum. *Rev Int Stud.* 2012;38(1):187–9.
24. Lisiak-Myszke M, Marciniak D, Bieliński M, Sobczak H, Garbacewicz Ł, Drogoszewska B. Application of finite element analysis in oral and maxillofacial surgery-A literature review. *Materials (Basel).* 2020;13(14)

25. Perez-Gonzalez A, Gonzalez-Lluch C, L. J, J. P, L. J. Biomechanical Models of Endodontic Restorations. *Theor Biomech.* 2011;(May 2014).
26. Magne P. Efficient 3D finite element analysis of dental restorative procedures using micro-CT data. *Dent Mater.* 2007;23(5):539–48.
27. Gambarini G, Galli M, Morese A, Abduljabbar F, Seracchiani M, Stefanelli LV, et al. Digital design of minimally invasive endodontic access cavity. *Appl Sci.* 2020;10(10).
28. Evans MRB. Minimally Invasive Approaches in Endodontic Practice. *Minimally Invasive Approaches in Endodontic Practice.* 2021.
29. Ritter V A, Boushell W L, Walter R. Sturdevant's Art and Science of Operative Dentistry. 7th ed. Ritter V A, Boushell W L, Walter R, editors. missouri: Elsevier Ltd; 2019.
30. Marshall SJ, Balooch M, Habelitz S, Balooch G, Gallagher R, Marshall GW. The dentin - enamel junction - a natural, multilevel interface. *J Eur Ceram Soc.* 2003;23(15):2897–904.
31. Paulista UE. 25 th Jubilee. *Biomimetics Restor Endod Treat Tooth.* 2023;
32. Milicich G, Rainey JT. Clinical presentations of stress distribution in teeth and the significance in operative dentistry. *Pract Periodontics Aesthet Dent.* 2000;12(7).
33. Gaikwad A, Pandit V. In vitro evaluation of the strength of endodontically treated teeth after preservation of soffit and pericervical dentin. *2016;1(6):93–6.*
34. Zarow M, Ramírez-Sebastià A, Paolone G, de Ribot Porta J, Mora J, Espona J, et al. A new classification system for the restoration of root filled teeth. *Int Endod J.* 2018;51(3):318–34.
35. Emamieh S, Hojati P, Ghasemi A, Torabzadeh H. Effect of cusp coverage and water storage on compressive strength of composite restorations of premolars. *J Clin Exp Dent.* 2018;10(4):e341–5.
36. Peters OA. The Guidebook to Molar Endodontics. *The Guidebook to Molar Endodontics.* 2017.
37. 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.
38. 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.
39. Butterworth C, Ellakwa AE, Shortall A. Fibre-reinforced composites in restorative dentistry. *Dent Update.* 2003;30(6):300–6.
 40. Holmström PH, Hopperstad OS, Clausen AH. Anisotropic tensile behaviour of short glass-fibre reinforced polyamide-6. *Compos Part C Open Access.* 2020;2(August).
 41. Pan Y. Mechanical and Microstructural Characteristics of the Fiber-Reinforced Composite Materials. *J Miner Mater Charact Eng.* 2022;10(06):477–88.
 42. Belli S, Eskitascioglu g. Biomechanical material properties and clinical use of a polyethylene fibre post - core. *8(3).*
 43. Lim ZE, Duncan HF, Moorthy A, McReynolds D. Minimally invasive selective caries removal: a clinical guide. *Br Dent J.* 2023;234(4):233–40.
 44. Mackenzie L, Banerjee A. Minimally invasive direct restorations: A practical guide. *Br Dent J [Internet].* 2017;223(3):163–71. Available from: <http://dx.doi.org/10.1038/sj.bdj.2017.661>
 45. Okeson JP. Management of Temporomandibular Disorders and Occlusion - Jeffrey P. Okeson - 8th Edition. 2019. 260–284 p.
 46. Tsujimoto A, Barkmeier WW, Takamizawa T, Latta MA, Miyazaki M. Depth of cure, flexural properties and volumetric shrinkage of low and high viscosity bulk-fill biomers and resin composites. *Dent Mater J.* 2017;36(2):205–13.
 47. Sakaguchi RL, Ferracane JL, Powers JM. Craig's restorative dental materials. Fourteenth. Craig's Restorative Dental Materials. Elsevier Inc.; 2018. 1–340
 48. Bona Á Della, Benetti P, Borba M, Cecchetti D. Flexural and diametral tensile strength of composite resins. *Braz Oral Res.* 2008;22(1):84–9.
 49. 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.
 50. Yaqin RI, Priyambodo BH, Prasetyo AB, Umar ML. Penerapan Metode Elemen Hingga Dalam Pemilihan Bahan Pada Desain Pisau Mesin Pencacah Plastik. *Sci J Mech Eng Kinemat.* 2021;6(2):85–98.
 51. Chien PYH, Walsh LJ, Peters OA. Finite element analysis of rotary nickel-

- titanium endodontic instruments: A critical review of the methodology. *Eur J Oral Sci.* 2021;129(5).
52. Magomedov IA, Khaliev MSU, Elmurzaev AA. Application of Finite Element Analysis in medicine. *J Phys Conf Ser.* 2020;1679(2).
 53. Borcic J, Braut A. Finite Element Analysis in Dental Medicine. *Finite Elem Anal - New Trends Dev.* 2012;3–20.
 54. Soares CJ, Rodrigues M de P, Faria-E-Silva AL, Santos-Filho PCF, Veríssimo C, Kim HC, et al. How biomechanics can affect the endodontic treated teeth and their restorative procedures. *Braz Oral Res.* 2018;32:169–83.
 55. da Rocha DM, Tribst JPM, Ausiello P, Dal Piva AM de O, da Rocha MC, Di Nicoló R, et al. Effect of the restorative technique on load-bearing capacity, cusp deflection, and stress distribution of endodontically-treated premolars with MOD restoration. *Restor Dent Endod.* 2019;44(3):1–12.
 56. Einhorn M, DuVall N, Wajdowicz M, Brewster J, Roberts H. Preparation Ferrule Design Effect on Endocrown Failure Resistance. *J Prosthodont.* 2019;28(1):e237–42.
 57. Hargreaves K, Berman L. *Cohen's Pathways of the Pulp* 12th Edition. 12th ed. Elsevier Ltd; 2021.
 58. Xie KX, Wang XY, Gao XJ, Yuan CY, Li JX, Chu CH. Fracture resistance of root filled premolar teeth restored with direct composite resin with or without cusp coverage. *Int Endod J.* 2012;45(6):524–9.
 59. Ozsevik AS, Yildirim C, Aydin U, Culha E, Surmelioglu D. Effect of fibre-reinforced composite on the fracture resistance of endodontically treated teeth. *Aust Endod J.* 2016;42(2):82–7.
 60. Riccardo M, Massimo S, Tommaso R, Damiano P, Mario A, Andrea B, et al. Effect of different fiber-reinforced solutions on fracture strength and pattern of endodontically treated molars. *Int J Prosthodont.* 2021;
 61. Bicaj T, Pustina T, Ahmed E, Dula L, Lila Z, Tmava-Dragusha A, et al. The Relation between the Preferred Chewing Side and Occlusal Force Measured by T-Scan III System. *Open J Stomatol.* 2015;05(04):95–101.
 62. 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.

63. 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.
64. Cheron RA, Marshall SJ, Goodis HE, Peters OA. Nanomechanical Properties of Endodontically Treated Teeth. *J Endod.* 2011;37(11):1562–5.
65. 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.* 2021;47(9):1472–80.
66. 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.
67. 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.
68. 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.
69. Rizzato FAP, Mondelli RFL, Furuse AY, Borges AFS, Mendonça G, Ishikirima SK. Shrinkage stress and elastic modulus assessment of bulk-fill composites. *J Appl Oral Sci.* 2019;27:1–9.
70. 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.
71. 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.
72. 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.
73. 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.

74. Hasanah, Prihashinta Uswatun. D. Fiber Dengan Braided Fiber Pada Fiber Reinforced. 2014;3(1):18–21.
75. 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.
76. Metal T, Implant D. Scientific Compendium. :1–24.
77. Afifa Zahratu Firda D. Pengaruh Aplikasi Fiber Braided Polyethylene Terhadap Kekuatan Tekan Resin Komposit Nanofil. 2016;
78. 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.
79. Zou Z, Hameed M. Combining interface damage and friction in cohesive interface models using an energy based approach. Compos Part A Appl Sci Manuf. 2018;112:290–8.
80. Kaladevi M, Balasubramaniam R. Biomechanics in restorative dentistry. 2020;6(2):251–6.
81. Wan B, Shahmoradi M, Zhang Z, Shibata Y, Sarrafpour B, Swain M, et al. Modelling of stress distribution and fracture in dental occlusal fissures. Sci Rep [Internet]. 2019;9(1):1–10. Available from: <http://dx.doi.org/10.1038/s41598-019-41304-z>
82. Lia Mondelli RF, Ishikirama SK, De Oliveira Filho O, Mondelli J. Fracture resistance of weakened teeth restored with condensable resin with and without cusp coverage. J Appl Oral Sci. 2009;17(3):161–5.
83. Serin Kalay T, Yildirim T, Ulker M. Effects of different cusp coverage restorations on the fracture resistance of endodontically treated maxillary premolars. J Prosthet Dent [Internet]. 2016;116(3):404–10. Available from: <http://dx.doi.org/10.1016/j.jprosdent.2016.02.007>
84. Daneshkazemi A, Mehdi M, Bahabad J, Hosein M, Iranaq A, Karimian E. Stress Distribution in Four Restorative Methods in Endodontically Treated Maxillary Premolar : A 3D Finite Element Analysis. 2019;(3).
85. Maravić T, Vasiljević D, Kantardžić I, Lainović T, Lužanin O, Blažić L. Influence of restorative procedures on endodontically treated premolars: Finite element analysis of a CT-scan based three-dimensional model. Dent Mater J. 2018;37(3):493–500.

86. Kishen A. Biomechanics of fractures in endodontically treated teeth. *Endod Top.* 2015;33(1):3–13.
87. Magne PB. Rationalization of shape and related stress distribution in posterior teeth: a finite element study using nonlinear contact analysisNo Title. *Int J Periodontics Restor Dent.* 2002;425–33.
88. Xia J, Tian ZR, Hua L, Chen L, Zhou Z, Qian L, et al. Enamel crystallite strength and wear: Nanoscale responses of teeth to chewing loads. *J R Soc Interface.* 2017;14(135).
89. Macedo VC, Faria E Silva AL, Martins LRM. Effect of cement type, relining procedure, and length of cementation on pull-out bond strength of fiber posts. *J Endod.* 2010;36(9):1543–6.
90. Yamanel K, Çağlar A, Gülsahi K, Özden UA. Effects of different ceramic and composite materials on stress distribution in inlay and onlay cavities: 3-D finite element analysis. *Dent Mater J.* 2009;28(6):661–70.
91. Haralur SB, Alamri AA, Alshehri SA, Alzahrani DS, Alfarsi M. Influence of occlusal thickness and radicular extension on the fracture resistance of premolar endocrowns from different all-ceramic materials. *Appl Sci.* 2020;10(8).
92. Chen Y, Chen D, Ding H, Chen Q, Meng X. Fatigue behavior of endodontically treated maxillary premolars with MOD defects under different minimally invasive restorations. *Clin Oral Investig.* 2022;26(1):197–206.
93. Magne P, Knezevic A. Simulated fatigue resistance of composite resin versus porcelain CAD/CAM overlay restorations on endodontically treated molars. *Quintessence Int [Internet].* 2009;40(2):125–33. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/19169444>
94. Dyer SR, Lassila LVJ, Jokinen M, Vallittu PK. Effect of fiber position and orientation on fracture load of fiber-reinforced composite. *Dent Mater.* 2004;20(10):947–55.
95. Ensaff H, O'Doherty DM, Jacobsen PH. The influence of the restoration-tooth interface in light cured composite restorations: A finite element analysis. *Biomaterials.* 2001;22(23):3097–103.
96. Tiu J, Belli R, Lohbauer U. Thickness influence of veneering composites on fiber-reinforced systems. *Dent Mater [Internet].* 2021;37(3):477–85. Available from: <https://doi.org/10.1016/j.dental.2020.12.002>

