

Höckerersatz mit einem thermoviskosen Universalkomposit nach selbstlimitierender Kariesexkavation

- [1] Wolff D, Staehle HJ, Frese C, Komplexe Zahnaufbauten als Alternative zur Überkronung. ZWR. 2015; 124 (1): 30-34.
- [2] Hickel R, et al. Direct composite restorations: extended use in anterior and posterior situations. Clinical Oral Investigations. 2004; 8 (2): 43-44.
- [3] Frese C, Wolff D, Staehle H. Proximal box elevation with resin composite and the dogma of biological width: clinical r2-technique and critical review. Oper Dent. 2014; 39 (1): 22-31.
- [4] Frese C, Wolff D, Staehle HJ. Die R2-Technik: zweiphasige direkte Kompositrestauration. Restaurative Versorgung extrem tiefer Kavitäten. Zahnärztliche Mitteilungen. 2014; 104 (5): 50-59.
- [5] Frese C, Wolff D, Staehle HJ. Komplexe Seitenzahnrestaurationen in der R1- und R2-Technik. Schwierige Ausgangssituationen und deren Lösung bei direkter Versorgung mit Kompositmaterialien. DFZ Der Freie Zahnarzt. 2014; 58(12): 72-81.
- [6] Frese C, et al. Recontouring teeth and closing diastemas with direct composite buildups: a 5-year follow-up. J Dent. 2013; 41 (11): 979-85.
- [7] Roggendorf MJ, et al. Effect of proximal box elevation with resin composite on marginal quality of resin composite inlays in vitro. J Dent. 2012; 40 (12): 1068-73.
- [8] Manhart J, Hickel R. "Bulk Fill"-Komposite. Neuartige Einsatztechnik von Kompositen im Seitenzahnbereich. Swiss Dental Journal. 2014; 124 (1): 19-28.
- [9] Lynch CD, et al. Guidance on posterior resin composites: Academy of Operative Dentistry - European Section. J Dent. 2014; 42 (4): 377-83.
- [10] Staehle HJ. Minimally invasive restorative treatment. J Adhes Dent. 1999; 1 (3): 267-84.
- [11] Heintze SD, Rousson V. Clinical effectiveness of direct class II restorations - a meta-analysis. J Adhes Dent. 2012; 14 (5): 407-31.
- [12] Staehle HJ, Frese C, Wolff D. Neue konservierend-restaurative Optionen in der Gerontostomatologie. Zahnmedizin up2date. 2017; 11 (2): 127-151.
- [13] Frese C, Staehle HJ. Wie invasiv ist minimalinvasiv? Management von Einzelzahnlücken aus konservierender Sicht. DFZ Der Freie Zahnarzt. 2018; 62 (3): 70-77.
- [14] Demarco FF, et al. Longevity of posterior composite restorations: not only a matter of materials. Dent Mater. 2012; 28 (1): 87-101.
- [15] Scholtanus JD, Ozcan M. Clinical longevity of extensive direct composite restorations in amalgam replacement: up to 3.5 years follow-up. J Dent. 2014; 42 (11): 1404-10.
- [16] Deliperi S, Bardwell DN. Direct cuspal-coverage posterior resin composite restorations: A case report. Oper Dent. 2006; 31 (1): 143-50.
- [17] Laegreid T, et al. Clinical decision making on extensive molar restorations. Oper Dent. 2014; 39 (6): E231-40.
- [18] Plotino G, et al. Fracture resistance of endodontically treated molars restored with extensive composite resin restorations. J Prosthet Dent. 2008; 99 (3): 225-32.
- [19] Denehy G, Cobb D. Impression matrix technique for cusp replacement using direct composite resin. J Esthet Restor Dent. 2004; 16 (4): 227-233.

- [20] Brackett WW, et al. Effect of restoration size on the clinical performance of posterior "packable" resin composites over 18 months. *Oper Dent*. 2007; 32 (3): 212-6.
- [21] Fennis, W.M., et al., Fatigue resistance of teeth restored with cuspal-coverage composite restorations. *Int J Prosthodont*. 2004; 17 (3): 313-7.
- [22] Segura A, Riggins R. Fracture resistance of four different restorations for cuspal replacement. *J Oral Rehabil*. 1999; 26 (12): 928-31.
- [23] Macpherson LC, Smith BG. Replacement of missing cusps: an in vitro study. *J Dent*. 1994; 22 (2): 118-20.
- [24] Mondelli RF, et al. Conservative approach to restore the first molar with extensive destruction: A 30-month follow-up. *Quintessence Int*. 2013; 44 (6): 385-91.
- [25] Kois DE, et al. Evaluation of fracture resistance and failure risks of posterior partial coverage restorations. *J Esthet Restor Dent*. 2013; 25 (2): 110-22.
- [26] Kantardzic I, et al. Influence of cavity design preparation on stress values in maxillary premolar: a finite element analysis. *Croat Med J*. 2012; 536): 568-76.
- [27] Xie KX, et al. 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.
- [28] ElAyouti A, et al. Influence of cusp coverage on the fracture resistance of premolars with endodontic access cavities. *Int Endod J*. 2011; 44 (6): 543-9.
- [29] Kuijs RH, et al. A randomized clinical trial of cusp-replacing resin composite restorations: efficiency and short-term effectiveness. *Int J Prosthodont*. 2006; 19 (4): 349-54.
- [30] Federlin M, et al. Kompositrestaurationen im Seitenzahnbereich. S1-Handlungsempfehlung (Langversion). AWMF-Registernummer: 083–028; Stand: Oktober 2016; gültig bis: Oktober 2021. *Deutsche Zahnärztliche Zeitschrift*. 2017; 72 (1): 75-82.
- [31] Laegreid T, Gjerdet NR, Johansson AK. Extensive composite molar restorations: 3 years clinical evaluation. *Acta Odontol Scand*. 2012; 70 (4): 344-52.
- [32] Deliperi S, Bardwell DN. Clinical evaluation of direct cuspal coverage with posterior composite resin restorations. *J Esthet Restor Dent*. 2006; 18 (5): 256-265.
- [33] Opdam, N.J., et al., Seven-year clinical evaluation of painful cracked teeth restored with a direct composite restoration. *J Endod*. 2008. 34(7): p. 808-11.
- [34] Fennis WM, et al. Randomized control trial of composite cuspal restorations: five-year results. *J Dent Res*. 2014; 93 (1): 36-41.
- [35] Kunzelmann KH. Komposite – komplexe Wunder moderner Dentaltechnologie. Teil 1: Füllkörpertechnologie. *Ästhetische Zahnmedizin*. 2007; 10 (3): 14-24.
- [36] Kunzelmann KH. Komposite – komplexe Wunder moderner Dentaltechnologie. Teil 2: Matrixchemie. *Ästhetische Zahnmedizin*. 2008; 11 (1): 22-35.
- [37] Ferracane JL. Resin composite - state of the art. *Dent Mater*. 2011; 27(1): 29-38.
- [38] Manhart J. Bulk-fill composites for posterior restorations. *Inside Dentistry*. 2015; 11 (3): 58-65.
- [39] Lenhard M. Bulk-Fill-Komposite - der schnelle Weg zur Restauration? *Quintessenz*. 2015; 66 (8): 879-895.
- [40] Manhart J. Muss es immer Kaviar sein? – Die Frage nach dem Aufwand für Komposite im Seitenzahnbereich. *ZMK*. 2011; 27(Sonderausgabe März 2011): 10-15.
- [41] Christensen GJ. Advantages and Challenges of Bulk-Fill Resins. *Clinicians Report*. 2012; 5 (1): 1-2.
- [42] Noack MJ. Wirtschaftliche Füllungstechnik. Warum und womit? *ZWR Das Deutsche Zahnärzteblatt*. 2013; 122 (3): 86-94.

- [43] Margeas RC. Bulk-Fill Materials: Simplify Restorations, Reduce Chairtime. *Compend Contin Educ Dent*. 2015; 36 (1): e1-e4.
- [44] Zorzin J. Bulk-Fill Komposite: Inkrementtechnik "Auf Wiedersehen"? *Zahnärztliche Praxis*. 2020; (5/6): 8-12.
- [45] Polydorou O. Bulk-Fill: Was biete ich meinen Patienten an? *Zahnärztliche Praxis*. 2020; (5/6): 13-18.
- [46] Ilie N, Stawarczyk B. Bulk-Fill-Komposite: neue Entwicklungen oder doch herkömmliche Komposite? *ZMK*. 2014; 30 (3): 90-97.
- [47] Tauböck TT. Bulk-Fill-Komposite. Wird die Füllungstherapie einfacher, schneller und erfolgreicher? *teamwork J Cont Dent Educ*. 2013; 16 (4): 318-323.
- [48] Feilzer AJ, De Gee AJ, Davidson CL. Setting stress in composite resin in relation to configuration of the restoration. *J Dent Res*. 1987; 66 (11): 1636-9.
- [49] VOCO-GmbH, Scientific Report: VisCalor bulk - Temperaturentwicklung während der Applikation. 2019.
- [50] Braun A. Temperature development inside the tooth during application of a thermoviscous bulk fill material. Report to VOCO, 2019.
- [51] Göstemeyer G, Schwendicke F. Kariesexkavation – der aktuelle Stand. *ZWR - Das Deutsche Zahnärzteblatt*. 2020; 129 (07/08): 317-328.
- [52] Ricketts D, Innes N, Schwendicke F. Selective Removal of Carious Tissue. *Monogr Oral Sci*. 2018; 27: 82-91.
- [53] Schwendicke F. Removing Carious Tissue: Why and How? *Monogr Oral Sci*. 2018; 27: 56-67.
- [54] Barros MMAF, et al. Selective, stepwise, or nonselective removal of carious tissue: which technique offers lower risk for the treatment of dental caries in permanent teeth? A systematic review and meta-analysis. *Clin Oral Investig*. 2020; 24 (2): 521-532.
- [55] Kunzelmann KH, Koch JH: Kariesexkavation: Neue Erkenntnisse und selbstlimitierende Methoden. *Zahnärztliche Mitteilungen*. 2011; 101 (13): 42-48.
- [56] de Goes MF, Shinohara MS, Freitas MS Performance of a new one-step multi-mode adhesive on etched vs non-etched enamel on bond strength and interfacial morphology. *J Adhes Dent*. 2014; 16 (3): 243-50.
- [57] Hanabusa M, et al. Bonding effectiveness of a new 'multi-mode' adhesive to enamel and dentine. *J Dent*. 2012; 40 (6): 475-84.
- [58] McLean DE, et al. Enamel Bond Strength of New Universal Adhesive Bonding Agents. *Oper Dent*. 2015; 40 (4): 410-7.
- [59] Takamizawa T, et al. Influence of different etching modes on bond strength and fatigue strength to dentin using universal adhesive systems. *Dent Mater*. 2016; 32 (2): e9-21.
- [60] Wagner A, et al. Bonding performance of universal adhesives in different etching modes. *J Dent*. 2014; 42 (7): 800-7.
- [61] Lenzi TL, et al. Bonding Performance of a Multimode Adhesive to Artificially-induced Caries-affected Primary Dentin. *J Adhes Dent*. 2015; 17 (2): 125-31.
- [62] Loguercio AD, et al. A new universal simplified adhesive: 36-Month randomized double-blind clinical trial. *J Dent*. 2015; 43 (9): 1083-92.
- [63] Munoz MA, et al. In vitro longevity of bonding properties of universal adhesives to dentin. *Oper Dent*. 2015; 40 (3): 282-92.
- [64] Da Rosa Rodolpho PA, et al. 22-Year clinical evaluation of the performance of two posterior composites with different filler characteristics. *Dent Mater*. 2011; 27 (10): 955-63.

- [65] van de Sande FH, et al. 18-year survival of posterior composite resin restorations with and without glass ionomer cement as base. *Dent Mater.* 2015; 31 (6): 669-75.
- [66] Manhart J, et al. Review of the clinical survival of direct and indirect restorations in posterior teeth of the permanent dentition. *Oper Dent.* 2004; 29 (5): 481-508.
- [67] Opdam NJ, et al. Longevity of posterior composite restorations: a systematic review and meta-analysis. *J Dent Res.* 2014; 93 (10): 943-9.
- [68] Opdam NJ, et al. 12-year survival of composite vs. amalgam restorations. *J Dent Res.* 2010; 89 (10): 1063-7.
- [69] Pallesen U, van Dijken JW. A randomized controlled 30 years follow up of three conventional resin composites in Class II restorations. *Dent Mater.* 2015; 31 (10): 1232-44.
- [70] Pallesen U, van Dijken JW. A randomized controlled 27 years follow up of three resin composites in Class II restorations. *J Dent.* 2015; 43 (12): 1547-58.