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Moderne CAD/CAM-Kompositmaterialien – deren Materialeigenschaften und Befestigungsstrategien

[1] Strietzel, R., Lahl, C.: CAD/CAM-Systeme in Labor und Praxis, S. 12 ff. Verlag Neuer Merkur GmbH München (2007), 978-3-937346-41-0 (ISBN).
[2] Rinke, S.: VOLLKERAMIK – Ein Praxiskonzept, S. 7 ff. Quintessenz Verlag Berlin (2011), 978-3-86867-049-3 (ISBN).
[3] Gebrauchsanleitung LavaTM Ultimate CAD/CAM Restaurationsmaterial, Deutsch, 3M ESPE Dental Products (6/2015), 44-0007-7648-2-A.
[4] Gebrauchsanleitung CERASMARTTM, Deutsch, GC DENTAL Products Corp (6/2015), 13008790 290655DK.
[5] Gebrauchsanleitung SHOFU BLOCK HC, Deutsch, SHOFU Inc (1/2014), 09 SS000032.
[6] Gebrauchsanleitung BRILLIANT Crios (1/2016), 3000399801.16.
[7] VITA CAD/CAM MATERIALIEN – Alle Lösungen auf einen Blick, Kompendium für Praxen und Labore. 994D – 0115 (X.) S – Version (01), VITA Zahnfabrik H. Rauter GmbH & Co. KG.
[8] Böhner, R., Claude, M., Kopfmann, C.: Characteristic of polymer based CAD/CAM blocks for permanent restorations, #597, IADR (2015), Antalya, Turkey.
[9] Spears, I.R., van Noort, R., Crompton, R.H., Cardew, G.E., Howard, I.C.: The Effects of Enamel Anisotropy on the Distribution of Stress in a Tooth. J Dent Res 72, 1526–1531 (1993).
[10] Meredith, N., Sherriff, M., Setchell, D.J., Swanson, S.A.: Measurement of the microhardness and Young's modulus of human enamel and dentine using an indentation technique, Arch Oral Biol 41, 539–545 (1996).
[11] Hülsmann, M.: Checklisten der Zahnmedizin, Endodontie, S. 19 ff, Georg Thieme Verlag (2008), 9783131382511 (ISBN).
[12] Zhi, L., Bortolotto, T., Krejci, I.: Comparative in vitro wear resistance of CAD/CAM composite resin and ceramic materials J Prosthet Dent (2015), pii: S0022-3913(15)00437-0. doi: 10.1016/j.prosdent.2015.07.011. [Epub ahead of print].
[13] Stawarczyk, B., Liebermann, A., Eichberger, M., Güth, J.-F.: Evaluation of mechanical an optical behaviour of current esthetic dental restorative CAD/CAM composites. J Mech Behav Biomed Mater 55, 1–11 (2015).
[14] Behr, M., Proff, P., Kolbeck, C., Langrieger, S., Kunze, J., Handel, G., Rosentritt, M.: The bond strength of the resin-to-zirconia interface using different bonding concepts. J Mech Behav Biomed Mater 4, 2–8 (2011).
[15] Kassotakis, E., Stavridakis, M., Bortolotto, T., Ardu, S., Krejci I.: Evaluation of the Effect of Different Surface Treatments on Luting CAD/CAM Composite Resin Overlay Workpieces. J Adhes Dent 17, 521–528 (2015).
[16] Frankenberger, R., Hartmann, V.E., Krech, M., Krämer, N., Reich, S., Braun, A., Roggendorf M.: Adhesive luting of new CAD/CAM materials. Int J Comput Dent 18, 9–20 (2015).
[17] Stawarczyk, B., Stich, N., Eichberger, M., Edelhoff, D., Roos, M., Gernet, W., Keul, C.: Long-term tensile bond strength of differently cemented nanocomposite CAD/CAM crowns on dentin abutment. Dent Mater 30, 334–342 (2014).
[18] Keul, C., Müller-Hahl, M., Eichberger, M., Liebermann, A., Roos, M., Edelhoff, D., Stawarczyk, B.: Impact of different adhesives on work of adhesion between CAD/CAM polymers and resin composite cements. J Dent 42, 1105–1114 (2014).
[19] Stawarczyk, B, Krawczuk, A., Ilie, N.: Tensile bond strength of resin composite repair in vitro using different surface preparation conditionings to an aged CAD/CAM resin nanoceramic. Clin Oral Investig 19, 299–308 (2015).

[20] Zuryati, A.B., Wahyuni, J., Siew, F., Zaihan, A., Dasmawati, M.: Shear bond strength of computer-aided design and computer-aided manufacturing feldspatic and nano resin ceramics blocks cemented with three different generations of resin cement. Conserv Dent 18, 355–359 (2015).
[21] Lührs, A.-K., Pongprueska, P., De Munck, J., Geurtsen, W., Van Meerbeek, B.: Curing mode affects bond strength of adhesively luted composite CAD/CAM restorations to dentin. Dental Materials 30, 281–291 (2014).
[22] Spitznagel, F.A., Horvath, S.D., Guess, P.C., Blatz, M.B.: Resin Bond to Indirect Composite and New Ceramic/Polymer Materials: A Review of the Literature. J Esth Rest Dent 26, 382–392 (2014).