

ZMK (31)3 2015, S. 144-146

Dr. Marcus Holzmeier

Langzeitretention mit innovativem Glasfasermaterial

Literatur:

- [1] Artun J, Spadafora AT, Shapiro PA. A 3-year follow-up study of various types of orthodontic canine-to-canine retainers. Eur J Orthod. 1997 Oct;19(5):501-9.
- [2] Silvestrini-Biavati A et al. In vitro determination of the mechanical and chemical properties of a fibre orthodontic retainer Eur J Orthod. 2012 Dec;34(6):693-7. doi: 10.1093/ejo/cjr083. Epub 2011 Jul 12. Online: <http://www.ncbi.nlm.nih.gov/pubmed/21750241>
- [3] Gandini P et al. Clinical comparison of multistranded metallic wire and direct-bond glass fiber reinforced resin composite. Abstract SP 456. 85th Congress of the European Orthodontic Society. Helsinki 2009.
- [4] Sfondrini MF et al. Clinical evaluation of bond failures and survival between mandibular canine-to-canine retainers made of flexible spiral wire and fiber-reinforced composite. J Clin Exp Dent. 2014 Apr 1;6(2):e145-9. doi: 10.4317/jced.51379. eCollection 2014 Apr.

- [1] Bloomer H., Harlan PH. D: In Lee Edward Travis: Handbook of speech pathology; Peter Owen Limited London 1959, S.608.
- [2] Böhme H./Slomski, B: «Das Orale» Die Mundhöhle in Kulturgeschichte und Zahnmedizin Wilhelm Fink, 2013.
- [3] Codoni S: Zeig mir deine Zunge und ich sage dir, wie du gehst und stehst – „Schnullern“, Sprechstörung, Zahnfehlstellung und Haltungsschwäche – Domänen des Multitasking, pädiatrie 6/09, S 22–30.
- [4] Codoni S.: Vielfältige Wechselwirkungen zwischen orofazialen System und dem ganzen Körper, Physio Active Suisse 05/2014.
- [5] Codoni S.: Die MFT – von den Gründerjahren bis heute S. 13–24 myobite 5/ 2013, S. 24
- [6] Codoni S: Nachgebohrt myobite 5/2013 S. 25-26.
- [7] Fascia Congress.org – Übersetzung; D.Albertani.
- [8] Fernsehen drs Sendung NZZ Format: die Zunge, das intelligente Organ, Sendung am 05.02.2013, erhältlich als video.
- [9] Grabowski R., Kuhnt G., Stahl F.: Interrelation between occlusal findings and orofacial myofunctional status in primary and mixed dentition: Part III: Interrelation between malocclusions and orofacial dysfunctions. Journal of Orofacial Orthopedics/Fortschritte der Kieferorthopädie 68, Nr. 6 (November 2007): 462-476.
- [10] Ohlendorf D, Seebach K.: „Effekte einer temporär erzeugten Okklusionssperrung auf die funktionelle Wirbelsäulenstellung beim Stehen“; <http://www.zmk-aktuell.de/zahnheilkunde/prothetik/story> (2012).
- [11] Paoletti S.: Anatomie, Strukturen, Techniken, Spezielle Osteopathie, 2.Auflage, Urban & Fischer 2011 S.136-137.
- [12] Ridder P.: Craniomandibuläre Dysfunktion Interdisziplinäre Diagnose und Behandlungsstrategien, Urban & Fischer, 2014 – Buchrücken.
- [13] Schleip R.: Die Bedeutung der Faszien in der manuellen Therapie, München S.10-16, 2004 Hippokrates Verlag.
- [14] Schreiber T: Vorlesungsskript in MAS CFKSc 2011-2013, Universität Basel.
- [15] Spitzer M.: Geist im Netz, Modelle für Lernen, Denken und Handeln, Spektrum Akademischer Verlag (2000) S. 31.
- [16] Welling A.: In Habits – eine interdisziplinäre Annäherung. Ätiologie und Genese von orofazialen Dyskinesien, Hrsg. Arbeitskreis für myofunktionelle Therapie, Eigenverlag, Basel, 2000.

[17] Yan An Tan: Gedrehte Zungen: Sprache und Identitätskonstruktion in literarischen Werken von Minderheitenschriftstellerinnen in Deutschland 2013 Wellesley College Digital Scholarship and Archive Honors Thesis Collection S.43 ff.

Weiterführende Literatur:

1. Hüter-Becker A./ Dölken M.: Physiotherapie in der Orthopädie, Georg Thieme Verlag 2009
2. Meert G.F.: Das Becken aus osteopathischer Sicht, Urban & Fischer, 3.Auflage 2009
3. Prodinger-Göckl D., Modell CMD in der Osteopathie – Interdisziplinäre Zusammenarbeit mit der Kieferorthopädie, Haug 2013
4. Myers, T.:Anatomy Trains. Myofasziale Leitbahnen für Manual- und Bewegungstherapeuten. 2.Auflage München, Elsevier, Urban & Fischer 2010
5. Sacher R.: Angeborene Fremdreﬂexe – Haltung und Verhalten früh regulieren, Urban & Fischer 2012
6. Suppé B./ Spirgi-Gantert I.: FBL Klein-Vogelbach Functional Kinetics. Die Grundlagen. 2007, Springer Verlag
7. Stoisin B. Die Körperorientierte Sprachtherapie – Fragen und Antworten - Masterarbeit 2014, Advanced Studies Universität Basel.

- [1] Hardekopf JD., Dunlap RM., Ahl D., Pelleu G.: The "furcation arrow". A reliable radiographic image? *J Periodontol* 58(4), 258–61 (1987).
- [2] Armitage GC.: Development of a classification system for periodontal diseases and conditions. *Ann Periodontol* 4(1), 1-6 (1999).
- [3] Klotz H.: Differentiation between necrotic ulcerative gingivitis and primary herpetic gingivostomatitis. *NY State Dent J* 39, 283–294 (1973).
- [4] Jenkins WMM., Papapanou NP.: Epidemiology of periodontal diseases in children and adolescents. *Periodontol* 2000 26, 16–32 (2001).
- [5] Rosenberg ES., Garber DA., Rossman L., Evian I.: A combined endodontic-periodontic lesion. Its management and resolution. *J Clin Periodontol* 8(5), 369–74 (1981).
- [6] Christie WH., Holthuis AF.: The endo-perio problem in dental practice: diagnosis and prognosis. *J Can Dent Assoc* 56(11), 1005–1011 (1990).
- [7] Hirschfeld L., Wasserman B.: A long-term survey of tooth loss in 600 treated periodontal patients. *J Periodontol* 49(5), 225–37 (1978).
- [8] Haffajee AD., Socransky SS.: Microbial etiological agents of destructive periodontal diseases. *Periodontology* 2000 5, 78–111 (1994).
- [9] van Winkelhoff AJ., Rams TE., Slots J.: Systemic antibiotic therapy in periodontics. *Periodontology* 2000 10, 45–78 (1996).
- [10] Brook I.: Microbiology and management of periodontal infections. *Gen Dent* 51(5), 424–428 (2003).
- [11] Gjermo P.: Chlorhexidine in dental practice. *J Clin Periodontol* 1, 143–152 (1974).
- [12] Proctor DB. & Baker CG.: Treatment of acute necrotizing ulcerative gingivitis with metronidazole. *J Canadian Dental association* 37, 376–380 (1971).
- [13] Loesche WJ., Syed SA., Laughon BE., Stoll J.: The bacteriology of acute necrotizing ulcerating ulcerative gingivitis. *J Periodont* 53, 223–230 (1982).
- [14] Johnson BD. & Engel D.: Acute necrotizing ulcerative gingivitis. A review of diagnosis, etiology and treatment. *J Periodontol* 57, 141–150 (1986).
- [15] Rowland RW.: Necrotizing ulcerative gingivitis. *Ann Periodontol* 4, 65–73 (1999).
- [16] Scully C., Laskaris G., Pindborg JJ., Porter SR., Reichardt P.: Oral manifestation of HIV infection and their management. I. More common lesions. *Oral Surg, Oral Med, Oral Pathol* 71, 158–166 (1991).
- [17] Horning GM. & Cohen ME.: Necrotizing ulcerative gingivitis, periodontitis, and stomatitis: Clinical staging and predisposing factors. *J Periodontol* 66, 990–998 (1995).
- [18] Lang NP., Tonetti MS.: Periodontal risk assessment (PRA) for patients in supportive periodontal therapy (SPT). *Oral Health Prev Dent* 1(1), 7–16 (2003).
- [19] Badersten A., Nilveus R., Egelberg J.: Effect of nonsurgical periodontal therapy . II. Severely advanced periodontitis *J Clin Periodontol* 11, 63–76 (1984a).
- [20] Badersten A., Nilveus R., Egelberg J.: Effect of nonsurgical periodontal therapy. III. Single versus repeated instrumentation. *J Clin Periodontol* 11, 114-124 (1984b).
- [21] Badersten A., Nilveus R., Egelberg J.: Effect of nonsurgical periodontal therapy. IV. Operator variability. *J Clin Periodontol* 12, 190–200 (1985a).
- [22] Badersten A., Nilveus R., Egelberg J.: Effect of nonsurgical periodontal therapy. VI Localization of sites with probing attachment loss. *J Clin Periodontol* 12, 351–359 (1985b).
- [23] Badersten A., Nilveus R., Egelberg J.: Effect of nonsurgical periodontal therapy. VIII Probing attachment changes related to clinical characteristics. *J Clin Periodontol* 187, 14, 425–432.

- [24] Hardekopf JD., Dunlap RM., Ahl D., Pelleu G.: The "furcation arrow". A reliable radiographic image? J Periodontol 58(4), 258–61 (1987).

- [1] Methyl methacrylate [MAK Value Documentation, 2010]. The MAK-Collection for Occupational Health and Safety. Ort: Wiley-VCH Verlag, 2002.
- [2] Aalto-Korte K, Alanko K, Kuuliala O, Jolanki R. Methacrylate and acrylate allergy in dental personnel. *Contact Dermatitis* 2007; 57: 324–330.
- [3] Attin T. Sicherheit und Anwendung von carbamidperoxidhaltigen Gelen bei Bleichtherapien. *Dtsch Zahnärztl Z* 1998; 53: 11–16.
- [4] Attin T. Die Aufhellung verfärbter, avitaler Zähne mit der "Walking-bleach-Technik". *Dtsch Zahnärztl Z* 2001; 56: 78–89.
- [5] Berghult B. Dentistry in antiquity. *Sven Med Tidskr* 2001; 5: 131–146.
- [6] Bertrand B, Colard T, Lacoche C, Salome JF, Vatteoni S. An original case of tin dental fillings from 18th century northern France. *J Dent Res* 2009; 88: 198–200.
- [7] Bjorklund G. The history of dental amalgam. *Tidsskr Nor Laegeforen* 1989; 109: 3582–3585.
- [8] Bowen RL, inventor; (U.S. Dept. of Commerce). assignee. Acrylic esters of bisphenol A diglycidyl ether. Application: US Patent No. 3179623, 1965 19610626.
- [9] Bowen RL, inventor; (U.S. Dept. of Commerce). assignee. Silica-resin direct filling material. Application: US Patent No. 31947834, 1965 19620501.
- [10] Buonocore mg. A simple method of increasing the adhesion of acrylic filling materials to enamel surfaces. *J Dent Res* 1955; 34: 849–53.
- [11] http://dfg.de/service/presse/pressemitteilungen/2011/pressemitteilung_nr_37/index.html
- [12] <http://www.dguv.de/ifa/Fachinfos/Nanopartikel-am-Arbeitsplatz/Beurteilung-von-Schutzmaßnahmen/index.jsp>
- [13] Diefenbach C, Eck M, Hohmann A, Reischl K, Ruppert KD, Schaub MD, et al. Dentalkomposite mit Tricyclo[5.2.1.02.6]decan-Derivaten. Google Patents, 2008.
- [14] Dietschi D, Benbachir N, Krejci I. In vitro colorimetric evaluation of the efficacy of home bleaching and over-the-counter bleaching products. *Quint Int* 2010; 41: 505–516.
- [15] Durner J, Debiak M, Burkle A, Hickel R, Reichl FX. Induction of DNA strand breaks by dental composite components compared to X-ray exposure in human gingival fibroblasts. *Arch Toxicol* 2011; 85: 143–148.
- [16] Durner J, Glasl B, Zaspel J, Kunzelmann KH, Hickel R, Reichl FX. Release of TEGDMA from composite during the chewing situation. *Dent Mater* 2010; 26: e197–204.
- [17] Durner J, Obermaier J, Draenert M, Ilie N. Correlation of the degree of conversion with the amount of elutable substances in nano-hybrid dental composites. *Dent Mater* 2012; 28: 1146–1153.
- [18] Durner J, Obermaier J, Ilie N. Investigation of different bleaching conditions on the amount of elutable substances from nano-hybrid composites. *Dent Mater* 2014; 30: 192–199.
- [19] Durner J, Spahl W, Zaspel J, Schweikl H, Hickel R, Reichl FX. Eluted substances from unpolymerized and polymerized dental restorative materials and their Nernst partition coefficient. *Dent Mater* 2010; 26: 91–99.
- [20] Durner J, Stojanovic M, Urcan E, Spahl W, Haertel U, Hickel R, et al. Effect of hydrogen peroxide on the three-dimensional polymer network in composites. *Dent Mater* 2011; 27: 573–580.

- [21] Durner J, Walther UI, Zaspel J, Hickel R, Reichl FX. Metabolism of TEGDMA and HEMA in human cells. *Biomaterials* 2010; 31: 818–823.
- [22] Durner J, Wellner P, Hickel R, Reichl FX. Synergistic interaction caused to human gingival fibroblasts from dental monomers. *Dent Mater* 2012; 28: 818–823.
- [23] Ferracane JL. Resin composite – state of the art. *Dent Mater* 2011; 27: 29–38.
- [24] Frauscher KE, Ilie N. Depth of cure and mechanical properties of nano-hybrid resin-based composites with novel and conventional matrix formulation. *Clin Oral Investig* 2012; 16: 1425–1434.
- [25] Furche S, Hickel R, Reichl FX, van Landuyt K, Shehata M, Durner J. Quantification of elutable substances from methacrylate based sealers and their cytotoxicity effect on with human gingival fibroblasts. *Dent Mater* 2013; 29: 618–625.
- [26] Goldberg M, Grootveld M, Lynch E. Undesirable and adverse effects of tooth-whitening products: a review. *Clin Oral Investig* 2010; 14: 1–10.
- [27] Goon AT, Isaksson M, Zimerson E, Goh CL, Bruze M. Contact allergy to (meth)acrylates in the dental series in southern Sweden: simultaneous positive patch test reaction patterns and possible screening allergens. *Contact Dermatitis* 2006; 55: 219–226.
- [28] Heidemann D. *Kariologie und Füllungstherapie*. München: Urban & Schwarzenberg, 1999.
- [29] Henriks-Eckerman ML, Suuronen K, Jolanki R, Alanko K. Methacrylates in dental restorative materials. *Contact Dermatitis* 2004; 50: 233–237.
- [30] Ilie N, Hickel R. Resin composite restorative materials. *Aust Dent J* 2011; 56 (Suppl 1): 59–66.
- [31] Ilie N, Obermaier J, Durner J. Effect of modulated irradiation time on the degree of conversion and the amount of elutable substances from nano-hybrid resin-based composites. *Clin Oral Investig* 2014; 18: 97–106.
- [32] Karmaker A, Prasad A, Sarkar NK. Characterization of adsorbed silane on fillers used in dental composite restoratives and its effect on composite properties. *J Mater Sci Mater Med* 2007; 18: 1157–1162.
- [33] Kopperud HM, Schmidt M, Kleven IS. Elution of substances from a silorane-based dental composite. *Eur J Oral Sci* 2010; 118: 100–102.
- [34] Krejci I, Lutz F. Posterior teeth – why no composite (yet)? *Phillip J Restaur Zahnmed* 1986; 3: 5–12.
- [35] Landsiedel R, Fabian E, Ma-Hock L, van Ravenzwaay B, Wohlleben W, Wiench K, et al. *Toxico-/biokinetics of nanomaterials*. *Arch Toxicol* 2012; 86: 1021–1060.
- [36] Lazarov A. Sensitization to acrylates is a common adverse reaction to artificial fingernails. *J Eur Acad Dermatol Venereol* 2007; 21: 169–174.
- [37] Leader SA. Direct acrylic fillings. *Br Dent J* 1948; 84: 214.
- [38] Li YC, Huang FM, Lee SS, Lin RH, Chang YC. Protective effects of antioxidants on micronuclei induced by camphorquinone/N,N-dimethyl-p-toluidine employing in vitro mammalian test system. *J Biomed Mater Res B Appl Biomater* 2007; 82: 23–28.
- [39] Lottner S, Shehata M, Hickel R, Reichl FX, Durner J. Effects of antioxidants on DNA-double strand breaks in human gingival fibroblasts exposed to methacrylate based monomers. *Dent Mater* 2013; 29: 991–998.
- [40] Mahaney BL, Meek K, Lees-Miller SP. Repair of ionizing radiation-induced DNA double-strand breaks by non-homologous end-joining. *Biochem J* 2009; 417: 639–650.
- [41] Marquardt W, Seiss M, Hickel R, Reichl FX. Volatile methacrylates in dental practices. *J Adhes Dent* 2009; 11: 101–107.
- [42] Mathisen GH, Ansteinsson V, Samuelsen JT, Becher R, Dahl JE, Bolling AK. TEGDMA and filler particles from dental composites additively attenuate LPS-induced cytokine release from the macrophage cell line RAW 264.7. *Clin Oral Investig* 2014; Band: Seitenzahlen.
- [43] Miletic VJ, Santini A. Remaining unreacted methacrylate groups in resin-based composite with respect to sample preparation and storing conditions using micro-Raman spectroscopy. *J Biomed Mater Res B Appl Biomater* 2008; 87: 468–474.

- [44] Moszner N, Angermann J, Fischer UK, Rheinberger VM. Dentalmaterialien auf der Basis von Dimersäure-Derivaten mit ringöffnend polymerisierbaren Gruppen. Google Patents, 2012.
- [45] Musenga A, Schedle A, Demelbauer U, Kremser L, Raggi MA, Kenndler E. Separation of ethoxylated bisphenol A dimethacrylates in dental composite after derivatisation to ionisable amines by capillary zone electrophoresis. *J Chromatogr A* 2004; 1034: 221–226.
- [46] Odian G. Principles of Polymerization. New York: Wiley, 2004.
- [47] Pandiarajan K. Hydrogen peroxide [as a reagent]. *Synth Reagents* 1985; 6: 60–155.
- [48] Reichl FX, Durner J, Muckter H, Elsenhans B, Forth W, Kunzelmann KH, et al. Effect of dental materials on gluconeogenesis in rat kidney tubules. *Arch Toxicol* 1999; 73: 381–386.
- [49] Reichl FX, Seiss M, Buters J, Behrendt H, Hickel R, Durner J. Expression of CYP450-2E1 and formation of 2,3-epoxymethacrylic acid (2,3-EMA) in human oral cells exposed to dental materials. *Dent Mater* 2010; 26: 1151–1156.
- [50] Reichl FX, Seiss M, Marquardt W, Kleinsasser N, Schweikl H, Kehe K, et al. Toxicity potentiation by H₂O₂ with components of dental restorative materials on human oral cells. *Arch Toxicol* 2008; 82: 21–28.
- [51] Reinhardt KJ. Unconverted double bonds and interface phenomena in composite materials. *Dtsch Zahnarztl Z* 1991; 46: 204–208.
- [52] Riddle JM. Gargilius Martialis as a medical writer. *J Hist Med Allied Sci* 1984; 39: 408–429.
- [53] Rieth P. Amalgam filling anno Domini 1528. *Dtsch Zahnarztl Z* 1966; 21: 301–307.
- [54] Roulet JF. A materials scientist's view: assessment of wear and marginal integrity. *Quintessence Int* 1987; 18: 543–552.
- [55] Ruiz-Delgado GJ, Mancias-Guerra C, Tamez-Gomez EL, Rodriguez-Romo LN, Lopez-Otero A, Hernandez-Arizpe A, et al. Dimethyl sulfoxide-induced toxicity in cord blood stem cell transplantation: report of three cases and review of the literature. *Acta Haematol* 2009; 122: 1–5.
- [56] Ruyter IE. Unpolymerized surface layers on sealants. *Acta Odontol Scand* 1981; 39: 27–32.
- [57] Schmalz G, Garhammer P. Risikomanagement bei zahnärztlichen Werkstoffen. *BZB Bayer Zahnarztl Mitt Kassenzahnarztl Ver Bayerns* 2008: 54–58.
- [58] Schulte P, Geraci C, Zumwalde R, Hoover M, Castranova V, Kuempel E, et al. Sharpening the focus on occupational safety and health in nanotechnology. *Scand J Work Environ Health* 2008; 34: 471–478.
- [59] Staehle J. Amalgam versus Komposit. *ZWP Special* 2003: 4–8.
- [60] Stanislawski L, Daniau X, Lauti A, Goldberg M. Factors responsible for pulp cell cytotoxicity induced by resin-modified glass ionomer cements. *J Biomed Mater Res* 1999; 48: 277–288.
- [61] Tanaka R, Shibata Y, Manabe A, Miyazaki T. Micro-structural integrity of dental enamel subjected to two tooth whitening regimes. *Arch Oral Biol* 2010; 55: 300–308.
- [62] Utterodt AD, Ruppert KD, Schaub MD, Diefenbach C, Reischl K, Hohmann A, et al. Dentalkomposite mit Tricyclo[5.2.0.2.6]decan-Derivaten. Google Patents, 2009.
- [63] Van Landuyt KL, Hellack B, Van Meerbeek B, Peumans M, Hoet P, Wiemann M, et al. Nanoparticle release from dental composites. *Acta Biomater* 2014; 10: 365–374.
- [64] Vasudeva G. Monomer systems for dental composites and their future: a review. *J Calif Dent Assoc* 2009; 37: 389–398.
- [65] Walther UI, Siagian, II, Walther SC, Reichl FX, Hickel R. Antioxidative vitamins decrease cytotoxicity of HEMA and TEGDMA in cultured cell lines. *Arch Oral Biol* 2004; 49: 125–231.
- [66] Weinmann W, Thalacker C, Guggenberger R. Siloranes in dental composites. *Dent Mater* 2005; 21: 68–74.
- [67] Xu HH, Weir MD, Sun L, Moreau JL, Takagi S, Chow LC, et al. Strong nanocomposites with Ca, PO(4), and F release for caries inhibition. *J Dent Res* 2010; 89: 19–28.

