

# Modernes professionelles Biofilmmmanagement – es ist Zeit für Veränderungen

## Über die Autoren

Ein Bericht von **Dr. Nadine Strafela-Bastendorf** und **Dr. Klaus-Dieter Bastendorf**.

## Literatur

1. Ahmad Z: "Al-Zahrawi - The Father of Surgery" ANZ Journal of Surgery, 2007;77 (Suppl. 1): A83, DOI: 10.1111/j.1445-2197.2007.04130.8.x
2. Axelsson, P., Lindhe, J. (1978): Effects of controlled oral hygiene procedures on caries and periodontal disease in adults. J Clin Periodont 5, 133.
3. Axelsson, P., Lindhe, J. (1981): Effect of controlled oral hygiene procedures on caries and periodontal disease in adults. Results after 6 years. J Clin Periodont 8, 239.
4. Axelsson, P., Lindhe, J., Nystrom, B. (1991): On the prevention of caries and periodontal disease. Results of a 15-year longitudinal study in adults. J Clin Periodont 18, 182.
5. Loe H, Theilade E, Jensen SB: Experimental gingivitis in man. J. Periodontol 1965; 36: 177-187
6. Loesche WJ: Chemotherapy of dental plaque infections. Oral Sci Rev 1976; 9: 65-107
7. Costerton J W. The Biofilm Primer. Springer, 2007
8. Marsh PD: Are dental diseases examples of ecological catastrophes? Microbiology 2003; 149: 279-294
9. Szafranski SP, Deng ZL, Tomasch F, Jarek M, Bhuju S, Meisinger C, Kühnisch J, Sztajer H, Wagner-Döbler I: Functional biomarkers for chronic periodontitis and insights into roles of Prevotella nigrescens and Fusobacterium nucleatum, a metatranscriptome analysis. Biofilms and Microbiomes 2015; 23: 1: 15017.DOI 10.1038/npjbiofilms.2015.17
10. Botti RH, Bossu M, Zallocco A, Polimeni A: Effectiveness of plaque indicators and air polishing for the sealing of pits and fissures. European Journal of Paediatric Dentistry 2010; 11.
11. Ramaglia L, Sbordone L, Ciaglia RN, Barone A, Martina R: A clinical comparison of the efficacy and efficiency of two professional prophylaxis procedures in orthodontic patients. European Journal of Orthodontics 199; 21: 423-428
12. Camboni S, Donnet M: Tooth surface comparison after Air Polishing and Rubber Cup: A Scanning Electron Microscopy Study. JClin Dent 2016; 27:13-18
13. Dragoo MR: A clinical evaluation of hand and ultrasonic instruments on subgingival debridement. With unmodified and modified ultrasonic instruments. Int J Periodontics Restorative Dent 1992; 12: 310-323.
14. Barendregt DS, van der Velden U, Timmerman MF, van der Wijden F: Penetration depths with an ultrasonic mini insert compared with a conventional curette in patients with periodontitis and in periodontal maintenance. J Clin Periodontol. 2008; 35: 31-36.
15. Iff,M., Marinello,G.P.: Acta Ultraschall-Geräte, Anwendung in der Parodontologie, Swiss Med Dent, Heft 9/98
16. Wennström JL, Tomasi C, Bertelle A, Dellasega E: Full mouth ultrasonic debridement versus quadrant scaling and root planing as an initial approach in the treatment of chronic periodontitis. J Clin Peridontol 2005; 32: 851-859
17. Sculean A, Bastendorf K-D, Becker C, Bush B, Einwag J, Lanoway C, Platzer U, Schmage P, Schoeneich B, Walter C, Wennström JL, Flemmig TF: A paradigm shift in mechanical biofilm management? Subgingival air polishing: a new way to improve mechanical biofilm management in the dental practice. Quintessence International 2013; 44: 475-477

18. Petersilka GJ, Steinmann D, Häberlein I, Heinecke A, Flemmig TF (2003b): Subgingival plaque removal in buccal and lingual sites using a novel low abrasive air-polishing powder. *Journal of Clinical Periodontology* 2003; 30: 328-333.
19. Petersilka GJ, Tunkel J, Barakos K, Heinecke A, Häberlein I, Flemmig TF (2003a): Subgingival plaque removal at interdental sites using a low abrasive air polishing powder. *Journal of Periodontology* 2003; 74: 307-311.
20. Keon-II Yang, Do-Young, Byung-Ock Kim, Sang-Joun Yu: Clinical and Microbiological Study about Efficacy of Air-polishing and Scaling and Root-planing, *International Journal of Oral Biology*, Vol. 40, No. 2, 2015, p.93-101
21. Drago L, Del Fabbro M, Bortolin M Vassena C, De Vecchi E Taschieri S: Biofilm Removal and Antimicrobial Activity of Two Different Air-Polishing Powders. An in Vitro Study, *Journal of Periodontology*, November, 2014, Vol. 85, No. 11, Pages 363-369 (doi: 10.1902/jop.2014.140134)
22. E.Hashino, M. Kuboniwa, S.A.Alghamdi, M.Yamaguchi, R.Yamamoto, H.Cho, A.Anamo: Erythritol alters microstructure and metabolomic profiles of biofilm composed of *Streptococcus gordonii* and *Porphyromonas gingivalis* *Molecular Oral Microbiology* 28 (2013) 435-451
23. Barnes C, Covey D., Watanabe H., Simetich B., Schulte J., Chen H.: An in vitro comparison of the effects of various Air Polishing Powders on enamel and selected esthetic restorative material. *JClin Dent* 2014; 25:76-87
24. Bozbay E, Dominici F, Gokbuget AY, Cintan S, Guida L, Aydi MS, Mariotti A, Pilloni A: Preservation of root cementum: a comparative evaluation of power-driven versus hand instruments. *Int J Dent Hygiene* September 2016 DOI: 10.111/idh.12249
25. Hägi T, Klemensberger S, Bereiter R, Nietzsche S, Cosgarea R, Flury S, Lussi A, Sculean A and Eick S: A Biofilm Pocket Model to evaluate different non-surgical periodontal treatment modalities in terms of Biofilm Removal and Reformation, Surface Alterations and Attachment of Periodontal Ligaments Fibroblasts, PLOS,ONE/DOI:10.1371/journal.pone.0131056,June29,2015
26. Tobias T. Hägi, Sabrina Klemensberger, Ricarda Bereiter Raluca Cosgarea, Simon Flury, Adrian Lussi Anton Sculean and Sigrun Eick: The Relative Effects of Root-Debridement on Biofilm-Removal and Hard-Substance-Alterations Using a New In-vitro Pocket Model. PLOS ONE/DOI:10.1371/journal.pone.0131056 June 2015
27. Bühler J, Amato M, Weiger R, Walter C.: A systematic review on the effects of airpolishing devices on oral tissues. *Int J Dent Hygiene* 2015;
28. Strafela-Bastendorf N, Bastendorf KD: Professionelle Biofilmentfernung-Tipps für den Praxisalltag. *Quintessenz* 2016; 67: 1069-1075 DOI:10.111/idh.12120
29. Strafela-Bastendorf N, Bastendorf KD: PZR-neu gedacht. zm 106, Nr. 117A, 1.6.2016 (1)
30. Haas M, Koller M, Arefnia B: Rauheit und Substanzerlust von Zahnoberflächen nach Biofilmentfernung mit unterschiedlichen Bearbeitungsverfahren. 2018: m-haas@m-haas.at

# Glasionomerversiegler für vorausschauenden Schutz

## Über die Autorin



**Dr. Fay Goldstep** ist Zahnärztin, Autorin und Fortbildnerin. Sie hält national und international Vorträge zu präventiver/minimal-invasiver Zahnmedizin, Weichgeweblasern, elektronischer Kariesdiagnostik, ganzheitlicher Zahnmedizin und Innovationen in der Zahnhygiene. Dr. Goldstep war Dozentin in Aufbaustudiengängen für ästhetische Zahnmedizin an der SUNY Buffalo, den Universitäten von Florida (Gainesville) und Minnesota (Minneapolis) sowie der UMKC (Kansas City). Sie gehört diversen Redaktionsleitungen an, ist Mitautorin von vier Lehrbüchern und publizierte über 100 Artikel. Dr. Goldstep berät verschiedene Dentalunternehmen und praktiziert in Toronto, Kanada.

## Literatur

1. Muthu MS, Sivakumar N. Pediatric dentistry. Principles and Practice. 1st ed. New Delhi: Elsevier; 2009
2. Gore DR. The use of dental sealants in adults: a long-neglected preventive measure. Int J Dent Hyg 2010; 8: 198-203
3. Cueto EI, Buonocore MG. Sealing of pits and fissures with an adhesive resin: its use in caries prevention. J Am Dent Assoc 1967; 75(1):121-8
4. Ekstrand KR, Christiansen J, Christiansen ME. Time and duration of eruption of first and second permanent molars: a longitudinal investigation. Community Dent Oral Epidemiol. 2003 Oct; 31(5):344-50
5. Antonson DE. Imagine a world without occlusal caries: are glass ionomer sealants the answer? Oral Health Journal 2012 Dec; 31:36
6. Berg JH. Glass ionomer cements. Pediatric Dent 2002; 24(5):430-438
7. Ahovuo-Saloranta A, Hiri A, Nordblad A, Mäkelä M, Worthington HV. Pit and fissure sealants for preventing dental decay in the permanent teeth of children and adolescents. Cochrane Database Syst Rev 2008; 4:CD001830
8. Bishara SE, Oosombat C, Ajlouni R, Denehy G. The effect of saliva contamination on shear bond strength of orthodontic brackets when using a self-etch primer. Angle Orthod 2002; 72:554-557
9. Smith DC. Development of glass-ionomer cement systems. Biomaterials 1998; 19:467-478
10. Yengopal V, Mickenautsch S, Benzerra AC, Leal SC. Caries-preventive effect of glass ionomer and resin-based fissure sealants on permanent teeth – a meta analysis. J Oral Sci 2009; 51:373-382
11. Mickenautsch S, Yengopal V. Caries-preventive effect of glass ionomer and resin-based fissure sealants on permanent teeth: an update of systematic review evidence. BMC Research Notes 2011; 4:22
12. Mickenautsch S, Yengopal V. Retention loss of resin-based fissure sealants – a valid predictor for clinical outcome? The Open Dentistry Journal 2013; 7:102-108
13. Niederman R. Glass ionomer and resin-based fissure sealants: equally effective? Evid Based Dent 2010; 11(1):10
14. Edwina A. M. Kidd. Essentials of Dental Caries: The Disease and its Management. Oxford University Press p 170, June 30, 2005
15. Edwina A. M. Kidd. Dental Caries: The Disease and its Clinical Management. John Wiley & Sons. P299, Apr 11, 2008
16. Sachin S. Glass ionomer cement and resin-based fissure sealants are equally effective in caries prevention: a critical summary of Yengopal V, Mickenautsch S, Benzerra AC, Leal SC. Caries-preventive effect of glass ionomer and resin-based fissure sealants on permanent teeth – a meta analysis. J Oral Sci 2009; 51:373-382. JADA 2011 May; 142(5):551-552
17. Antonson, SA, Kilinc E, Antonson, DE. Depth of Penetration of Fissure Sealants on Contaminated Enamel Surface. J Dent Res 2006; 85(Spec Iss B):1580