

Winner in Prevention: The GBT Experience



Over 400,000 patients share their verdict:
Patients only want GBT - nothing else.

Winner in prevention: The GBT Experience

Survey of over 400,000 patients worldwide

Guided Biofilm Therapy (GBT) is a systematic, evidence-based and modular concept for professional prevention, periodontal and peri-implant treatment for lifelong maintenance. A unique global survey of over 400,000 patients provided a clear result: more than 94% prefer GBT as a positive overall experience.

Oral health is based on two pillars: firstly, the professional removal of biofilm and dental calculus with intensive oral hygiene education, and secondly, sound advice and motivation for oral health [1–3]. Both pillars have a preventive effect on both oral and general health, as well as on their interaction. However, many patients only attend regular preventive dental appointments if the experience is a positive one and they are involved in the preventive treatment as a responsible partner [4,5]. The EMS concept of Guided Biofilm Therapy (GBT) developed by universities and dental practitioners fulfills all these requirements [6,7]. The current results of a worldwide patient survey in dental practices that work according to the state-of-the-art GBT method are presented in the following.

Conclusive results

Since the fall of 2021, GBT-certified practices and clinics have been receiving completed questionnaires by their patients for anonymized evaluation (n=400,978, as of November 4, 2024). These comprise seven questions to be rated on a scale of 0 to 5. All responses demonstrated a high level of acceptance for GBT (93.4–94.6%) with approximately 4.7 out of 5.0 possible points. In a direct comparison of GBT with previous methods (hand instruments, brushes and polishing pastes), 94.1% prefer the GBT protocol (**Fig. 1**). Corresponding results were obtained with 93.6% for the average assessment of freedom from pain. The vast majority (93.4%) also consider the disclosure of biofilm, an integral part of GBT, to be useful. It is used by the dental hygienist as quality control to ensure that the biofilm has been completely removed and also provides patients with a basis for improved oral hygiene. To offer GBT treatment at the highest level, it is a prerequisite that the practice team receive theoretical and practical training from the Swiss Dental Academy (SDA) – the EMS institute for further education.

Optimal preservation of tooth substance

On the one hand, the professional removal of plaque must be effective and as time-saving as possible. On the other hand, tooth enamel, dentine and root surfaces should be treated with maximum care, even when plaque is removed repeatedly over a long period of time, to avoid loss of substance [8,9]. Loud noise, e.g. from ultrasound instruments, or unpleasant scratching with hand instruments, should be avoided as far as possible. Guided Biofilm Therapy, as a clinical protocol, fulfills these conditions in a scientifically well-documented manner. During professional mechanical plaque removal, the biofilm is first removed as the causative factor with AIR-FLOWING® from all accessible oral surfaces [10]. This can be achieved most effectively and economically using the AIRFLOW® Prophylaxis Master device in combination with the AIRFLOW® MAX or the PERIOFLOW® handpiece and with the use of AIRFLOW® PLUS powder (**Figs. 2 and 3**) [11].

Only in the second step is a piezoceramic ultrasonic scaler (PIEZON® PS NO PAIN) used to remove the now more visible residual dental calculus. Both technologies are particularly gentle on tissue

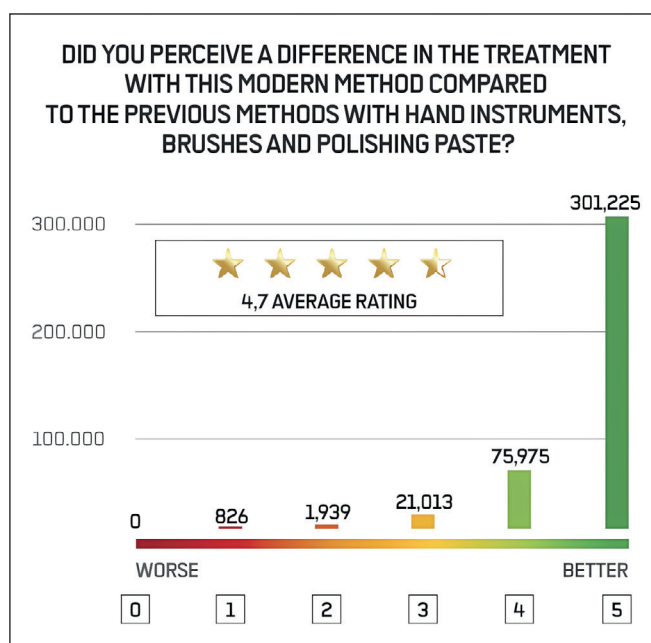


Fig. 1: Patients love the GBT Experience: 94.1% of the more than 400,000 patients surveyed rated the modular and risk-oriented protocol of Guided Biofilm Therapy with 4 or 5 stars, making it their clear preference.



Fig. 2: State-of-the-art prevention with AIR-FLOWING®: This effective yet gentle method is ideal for managing biofilm on all oral tissues, including implants and restorations.

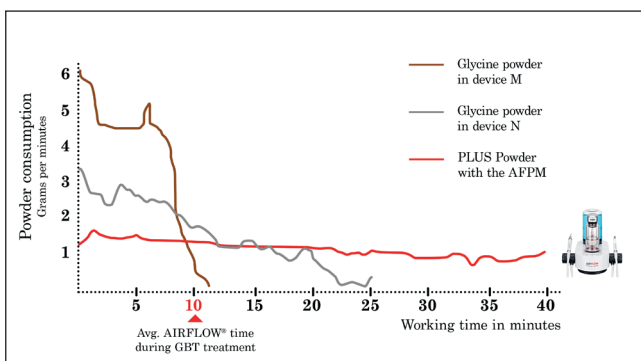


Fig. 3: State-of-the-art prevention with AIR-FLOWING®: The flow-optimized (constant laminar) powder flow of AIRFLOW® MAX handpieces ensures more consistent and efficient biofilm removal compared to other instruments, while significantly reducing powder consumption [11].

and are rated by patients as being more pleasant than other instruments [12,13]. Based on a positive overall treatment experience, patients are motivated to return for regular recall appointments. Subsequent “polishing” with rubber cups and paste does not improve surface smoothness and therefore provides no additional benefit [9,14].

The GBT Experience

Patients desire effective prevention delivered at eye level and aligned with state-of-the-art science and technology. To ensure patient loyalty – and thus the economic success of a dental practice – it is crucial to provide preventive treatment that is painless, structured, and relaxed while maximizing efficiency: the GBT Experience. The dental team also benefits from the systematic concept and ergonomically optimized devices and techniques. According to unanimous user feedback, these features help avoid excessive workloads caused by the daily, time-consuming use of hand instruments [15].

The results of the survey presented here, involving more than 400,000 patients from dental practices that routinely employ GBT, demonstrate the method’s high level of acceptance in everyday clinical practice. These findings confirm study data from the University of Zurich, where 96% of surveyed patients expressed a preference for GBT over traditional methods involving hand instruments and polishers [16]. Guided Biofilm Therapy remains the absolute favorite for professional prevention among patients. ■

Pictures: © EMS

GBT Certification – The Best Investment for Your Practice

Professional prevention at the highest level not only enhances the clinical qualifications of your team but also significantly improves the economic efficiency of your practice. GBT certification ensures standardized clinical and technical quality, backed by the Swiss Dental Academy of EMS.

For more information, visit:

<https://gbt-dental.com/PS-ZMK-1224-EN-CER>



HAPPY PATIENTS HAPPY CLINICIANS



#IAMGBT

EMS 
MAKE ME SMILE.

Literature

- [1] Axelsson P, Nystrom B, Lindhe J. The long-term effect of a plaque control program on tooth mortality, caries and periodontal disease in adults. Results after 30 years of maintenance. *J Clin Periodontol.* 2004;31(9):749-57. Epub 2004/08/18. <https://www.ncbi.nlm.nih.gov/pubmed/15312097>
- [2] Tonetti MS, Chapple IL, Jepsen S, et al. Primary and secondary prevention of periodontal and peri-implant diseases: Introduction to, and objectives of the 11th European Workshop on Periodontology consensus conference. *J Clin Periodontol.* 2015;42 Suppl 16:S1-4. <https://www.ncbi.nlm.nih.gov/pubmed/25683242>
- [3] Herrera D, Sanz M, Shapira L, et al. Periodontal diseases and cardiovascular diseases, diabetes, and respiratory diseases: Summary of the consensus report by the European Federation of Periodontology and WONCA Europe. *Eur J Gen Pract.* 2024;30(1):2320120. Epub 20240321. <https://www.ncbi.nlm.nih.gov/pubmed/38511739>
- [4] Amerio E, Mainas G, Petrova D, et al. Compliance with supportive periodontal/peri-implant therapy: A systematic review. *Journal of Clinical Periodontology.* 2020;47(1):81-100. <https://www.ncbi.nlm.nih.gov/pubmed/31562778>
- [5] Enkling N, Marwinski G, Johren P. Dental anxiety in a representative sample of residents of a large German city. *Clin Oral Investig.* 2006;10(1):84-91. Epub 20060214. <https://www.ncbi.nlm.nih.gov/pubmed/16477408>
- [6] Bastendorf K, Strafela-Bastendorf N. Auf das klinische Protokoll kommt es an – PZR, UPT und GBT. *Quintessenz.* 2020;71(12):1380-9. <https://www.quintessencepublishing.com/deu/de/article/867027/quintessenz-zahnmedizin/2020/12/auf-das-klinischeprotokoll-kommt-es-an-pzr-upt-und-gbt>
- [7] Lang N, A. L, KD. B. Wissenschaftlicher Konsensus Guided Biofilm Therapy-Protokoll. Ein neues Konzept für die primäre und sekundäre Prävention. 2019.
- [8] Camboni S, Donnet M. Tooth Surface Comparison after Air Polishing and Rubber Cup: A Scanning Electron Microscopy Study. *J Clin Dent.* 2016;27(1):13-8. Epub 2017/04/09. <https://www.ncbi.nlm.nih.gov/pubmed/28390211>
- [9] Graetz C, Plaumann A, Wittich R, et al. Removal of simulated biofilm: an evaluation of the effect on root surfaces roughness after scaling. *Clin Oral Investig.* 2016. <https://www.ncbi.nlm.nih.gov/pubmed/27233902> <https://link.springer.com/content/pdf/10.1007/s00784-016-1861-9.pdf>
- [10] Mensi M, Scotti E, Sordillo A, et al. Plaque disclosing agent as a guide for professional biofilm removal: A randomized controlled clinical trial. *Int J Dent Hyg.* 2020;18(3):285-94. Epub 20200526. <https://www.ncbi.nlm.nih.gov/pubmed/32348624>
- [11] Donnet M, Fournier M, Schmidlin PR, et al. A Novel Method to Measure the Powder Consumption of Dental Air-Polishing Devices. *Applied Sciences.* 2021;11(3):1101. <https://www.mdpi.com/2076-3417/11/3/1101>
- [12] Buhler J, Amato M, Weiger R, et al. A systematic review on the patient perception of periodontal treatment using air polishing devices. *Int J Dent Hyg.* 2016;14(1):4-14. Epub 2015/01/27. <https://www.ncbi.nlm.nih.gov/pubmed/25619863>
- [13] Aslund M, Suvan J, Moles DR, et al. Effects of two different methods of non-surgical periodontal therapy on patient perception of pain and quality of life: a randomized controlled clinical trial. *J Periodontol.* 2008;79(6):1031-40. <https://www.ncbi.nlm.nih.gov/pubmed/18533780>
- [14] Kruse AB, Fortmeier S, Vach K, et al. Impact of air-polishing using erythritol on surface roughness and substance loss in dental hard tissue: An ex vivo study. *PLoS One.* 2024;19(2):e0286672. Epub 20240226. <https://www.ncbi.nlm.nih.gov/pubmed/38408064>
- [15] Dong H, Barr A, Loomer P, et al. The effects of periodontal instrument handle design on hand muscle load and pinch force. *J Am Dent Assoc.* 2006;137(8):1123-30; quiz 70. Epub 2006/07/29. <https://www.ncbi.nlm.nih.gov/pubmed/16873329>
- [16] Furrer C, Battig R, Votta I, et al. Patientenakzeptanz nach Umstellung auf «Guided Biofilm Therapy». *Swiss Dent J.* 2021;131(3):229-34. <https://pubmed.ncbi.nlm.nih>



MORE ABOUT GBT