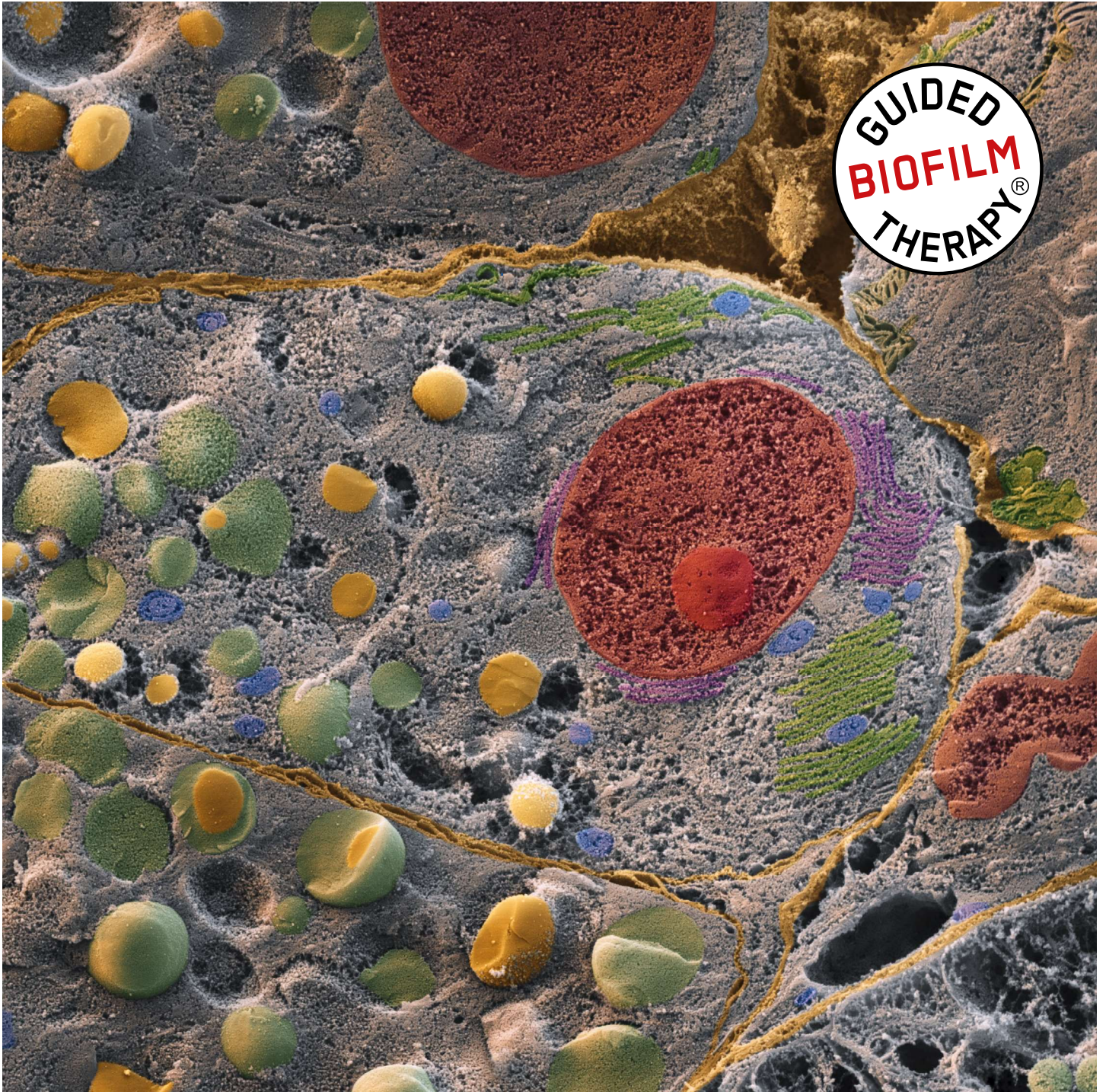


GUIDED **BIOFILM** THERAPY

PRESS ARTICLES AND CLINICAL EVIDENCE 2024 - VOL. 3



Scanning electron micrograph (SEM) of a freeze-fractured parotid acinar cell showing protein storage granules (original magnification $\times 8000$).

Gruber R, Stadlinger B, Terheyden H. Cell-to-Cell Communication: Cell Atlas
Visual Biology in Oral Medicine, 1st Edition, Quintessence Publishing, Berlin, ©2022
EMS Private Label edition; SEM images: eye of science.

SDA 
SWISS DENTAL ACADEMY

GBT IN THE PRESS



By definition, GBT is a risk-oriented, evidence-based, systematic, modular, individual, universally applicable prevention and treatment protocol. GBT can be applied in all patients, even with complex oral and general health issues and in all age groups. More than 120 publications on the individual GBT steps form the scientific basis of this protocol. We encourage you to explore the [latest articles published in dental magazines](#) as well as [studies](#) about Guided Biofilm Therapy from July to September 2024.

GUIDED BIOFILM THERAPY: THE OPTIMAL SOLUTION FOR IMPLANT MAINTENANCE

► EMS Korea news, 09/24

Guided Biofilm Therapy®: The Optimal Solution for Implant Maintenance

Implant-related diseases are generally categorized into two main types: peri-implantitis and peri-implant mucositis. There are various reasons for implant deterioration, but studies have shown that implants may fail due to gum disease, especially in cases where they were placed after tooth loss due to periodontitis. Peri-implantitis, which involves bone loss, typically follows the stage of peri-implant mucositis. The symptoms of mucositis are similar to those of gingivitis in natural teeth, including gum bleeding without the loss of connective tissue around the implant. Early treatment is crucial to restore the gums to a healthy state.

During maintenance, patients with mucositis may show gingival redness, subgingival plaque or foreign substances like implant cement. It is important for dentists to be vigilant for inflammation by assessing bleeding on probing (BOP) and using an explorer (ODU #112) for subgingival probing, covering the implant with a sterile cap. The symptoms of mucositis are similar to those of gingivitis in natural teeth, including gum bleeding without the loss of connective tissue around the implant. Early treatment is crucial to restore the gums to a healthy state.

PRACTICE PORTRAIT: GUIDED BIOFILM THERAPY AT THE FOTZN'SPANGLEREI DENTAL PRACTICE CORE VALUES: WITHIN THE TEAM AND DURING PREVENTION EFFORTS

► Dental Magazin, 5/24

Core Values: within the team and during prevention efforts

Dr. Petra Vitz and her husband, business manager Alexander Vitz, opened their first form'spangleri dental practice in Garroch-Partenkirchen in 2018. It was clear from the outset that they were committed to patient care and hygiene. They place a consistent emphasis on high-quality treatment and high quality. This standard takes the form of Guided Biofilm Therapy (GBT).

Dr. Petra Vitz used to be terrified of the device. Now she is confident. The practice with two separate rooms for GBT and for general dentistry. The practice with two separate rooms for GBT and for general dentistry. The practice with two separate rooms for GBT and for general dentistry.

SWISS DENTAL ACADEMY (SDA) HANDS-ON AT THE GBT TRAINING CENTER IN MUNICH BECOME A PREVENTION EXPERT

► Teamwork 4/24

Become a Prevention Expert

Hands-on at the GBT Training Center in Munich

Over a year ago, the Swiss Dental Academy (SDA) opened a state-of-the-art training center in Munich, offering a wide range of courses for dentists, orthodontists, and dental technicians. The center focuses on the practical application of Guided Biofilm Therapy (GBT) with the AirFlow ProphyJet. The center focuses on the practical application of Guided Biofilm Therapy (GBT) with the AirFlow ProphyJet.

ORAL HYGIENE AS PART OF THE PROPHYLAXIS CONCEPT

► Wir in der Zahnarztpraxis 03/2024

Oral hygiene as part of the prophylaxis concept

Prevention is a healthy lifestyle, it's good hygiene that plays an essential role in oral health. If long-term stability is to be ensured, patients need a coordinated package of care covering the full spectrum of professional biologic and occlusal management, individual education as well as instruction in oral hygiene.

The very essence of dentistry is the prevention of oral diseases. The prevention of oral diseases is the very essence of dentistry. The prevention of oral diseases is the very essence of dentistry.

GUIDED BIOFILM THERAPY

1. GUIDED BIOFILM THERAPY VERSUS CONVENTIONAL PROTOCOL—CLINICAL OUTCOMES IN NON-SURGICAL PERIODONTAL THERAPY

Cyris, M., Festerling, J., Kahl, M. et al.

BMC Oral Health (2024) 24:1105

<https://bmcoralhealth.biomedcentral.com/articles/10.1186/s12903-024-04898-z>

CLINICAL RELEVANCE

- ▶ This randomized controlled clinical study evaluated the effectiveness between conventional instrumentation and Guided Biofilm Therapy (GBT) with respect to reduction in pathologically increased pocket probing depths (PPD > 3 mm) and time taken during non-surgical periodontal therapy (NSPT) over 2 months in patients with stage III-IV periodontitis. Results demonstrate that both treatments achieved comparable outcomes, however GBT exhibited a significantly shorter time in addition to a greater % pocket closure than the control group.

2. EVALUATING THREE APPROACHES TO ENHANCE ORAL HYGIENE IN ADULT ORTHODONTIC PATIENTS

Alshahrani, A., Alshehri, Z.A., Alzahrani, N.M., leslom, A.N., Alasmari, M.M., Abdullah, M., Kamran, Kamran, D.M., Abdulrahman, Z., Alshehri, N.M., Alzahrani, M., hassan asiri, A., Mohammed, M., & Alasmari, F. Annals ASH& KMDC 2024, Vol. 29(3): 248-255

<https://api.semanticscholar.org/CorpusID:272271601>

CLINICAL RELEVANCE

- ▶ Adult patients with fixed orthodontic appliances benefit from improved dental hygiene outcomes when using video graphic methods and plaque-disclosing tablets. GBT follows the same principles and emphasizes the need for disclosing as a step within the protocol.

CASES 1



CASES 2



GUIDED BIOFILM THERAPY

3. GUIDED BIOFILM THERAPY FOR MANAGEMENT OF “DESQUAMATIVE GINGIVITIS”—CLINICAL CASES

Yaneva B, Mutafchieva M, Shentov P, Tomov G.

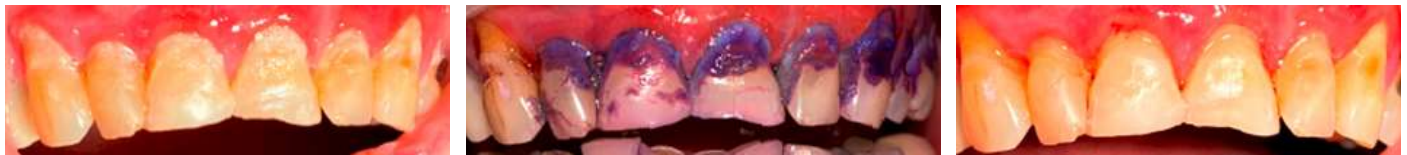
Clinics and Practice. 2024; 14(5):1931-1939.

<https://doi.org/10.3390/clinpract14050153>

CLINICAL RELEVANCE

- ▶ The clinical cases demonstrated the effectiveness of Guided Biofilm Therapy (GBT) in complex gingival conditions. Specifically, reducing discomfort, improving patient compliance and clinical outcomes in patients with desquamative gingivitis, particularly in those suffering from mucous membrane pemphigoid, pemphigus vulgaris, and oral lichen planus.
- ▶ GBT guided by use of the disclosing agent and AIRFLOW® PLUS Powder significantly improves patients' perception and dentists' treatments and can be used in patients with desquamative gingivitis.

CASES 1 : MUCOUS MEMBRANE PEMPHIGOID



CASE 2: PEMPHIGUS VULGARIS



CASE 3: LICHEN PLANUS



4. THE ROLE OF ERYTHRITOL/GLYCINE AIR POLISHING POWDER IN NON-SURGICAL PERIODONTAL THERAPY

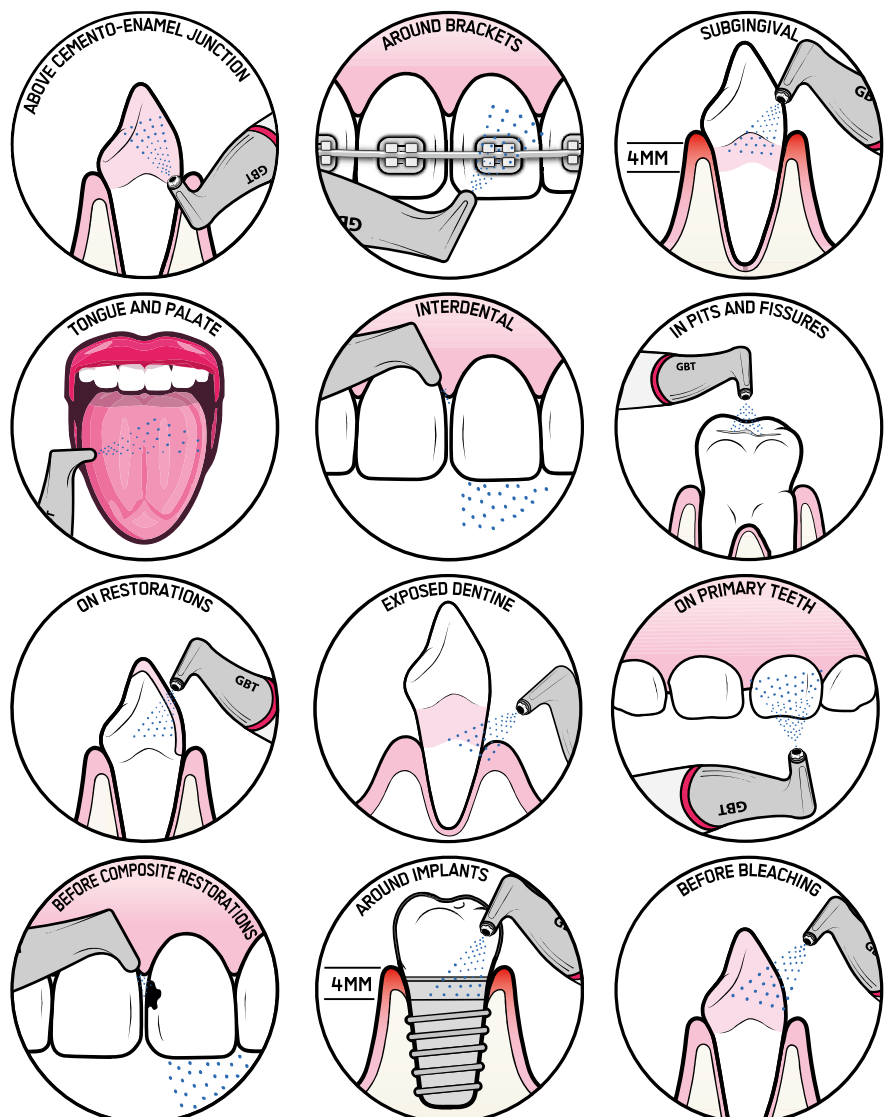
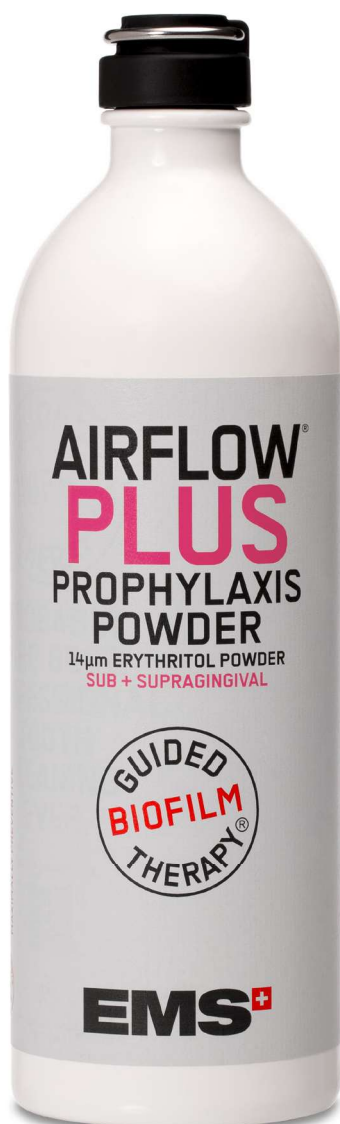
Mohammed Khalid Ayoob , Hayder Raad Abdulbaqi.

Misan Journal for Academic studies. Vol 23, Issue 59, June 2024.

<https://www.misan-jas.com/index>

CLINICAL RELEVANCE

- This literature review includes 12 months', or longer, data to evaluate the effectiveness of erythritol/glycine powder AIR-FLOWING® (EPAP/GPAP) in non-surgical periodontal treatment (NSPT) with respect to clinical and microbiological parameters. The review concluded that, irrespective of the powder used, AIR-FLOWING® showed a comparable clinical outcome with scaling and root planning (SRP), with superiority of AIR-FLOWING® in terms of antimicrobial effectiveness and efficiency in biofilm removal. AIR-FLOWING® also demonstrated improved patient compliance, reduced pain perception, and an overall enhanced patient experience around natural teeth or implants.



AIR-FLOWING®

5. LOW-ABRASIVE AIR-POLISHING POWDERS— CHARACTERISTICS AND APPLICATION IN CLINICAL PRACTICE. A REVIEW

Irena Georgieva, Zlatina Tsoneva

Scripta Scientifica Medicinae Dentalis, 10(1):33-39

<https://journals.mu-varna.bg/index.php/ssmd/article/>

CLINICAL RELEVANCE

- Use of low-abrasive powders like AIRFLOW® PLUS Powder require not only less time but is also associated with higher patient comfort. AIR-FLOWING® during GBT is optimal for subgingival biofilm management.

6. THE EFFICACY OF DIODE LASER AND SUBGINGIVAL AIR POLISHING WITH ERYTHRITOL IN TREATMENT OF PERIODONTITIS (CLINICAL AND MICROBIOLOGICAL STUDY)

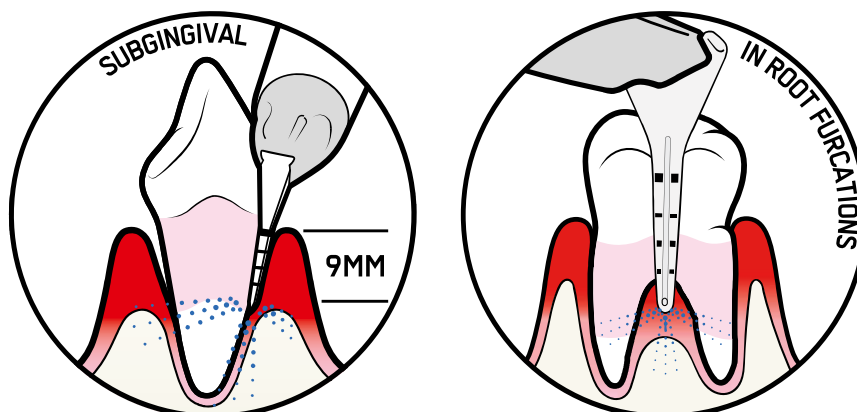
Elmeligy, S.M.A., Saleh, W., Elewa, G.M. et al.

BMC Oral Health 24, 763 (2024)

<https://doi.org/10.1186/s12903-024-04481-6>

CLINICAL RELEVANCE

- The use of either diode laser or AIR-FLOWING® with PERIOFLOW® Nozzle, in addition to scaling and root planning (SRP), offers an accelerated periodontal treatment method, promoting bacterial reduction and enhancing periodontal health in patients with stage 1 or 2 periodontitis. GBT with AIR-FLOWING® (PERIOFLOW® Nozzle) is a logical approach in patients with periodontal disease.



7. LONG-TERM SUCCESS OF DENTAL IMPLANTS: MAINTENANCE PROTOCOLS AND PATIENT CARE

Dr. Major Priyank Sen, Dr. Nikhil Kumar, Dr Preeti Kale

JMDF/Vol 1/Sup. Issue 1/Jan-June/2024

<https://journalofmedicalanddentalfrontiers.com>

CLINICAL RELEVANCE

- ▶ This review on recent research and expert opinions concluded that implementing comprehensive maintenance strategies, including both professional interventions and patient engagement in home care practices, is the way forward for long term success of dental implants. By highlighting the importance of preventive care, tailored maintenance plans, and ongoing patient support, dental professionals can improve the longevity and functionality of dental implants. Maintenance protocols are needed to improve the quality of life for patients with dental implants.
- ▶ GBT is the clear and simple solution for long-term implant maintenance. GBT not only emphasizes patient motivation and education but, through AIR-FLOWING[®], it also promises comfortable treatments, encouraging patients to come for maintenance treatment and therefore improving the longevity of their implants.

8. EVALUATION OF A SINGLE NON-SURGICAL APPROACH IN THE MANAGEMENT OF PERI-IMPLANTITIS: GLYCINE POWDER AIR-POLISHING VERSUS ULTRASONIC DEVICE

E. Jolla, T. Pizzolante, A. Bianchi, M. Capogreco, S. Mummolo

Oral and Implantology, 15(1), 50-61

CLINICAL RELEVANCE

- ▶ This short-term clinical study confirmed that while both AIR-FLOWING[®] and ultrasonics as a single approach improve clinical parameters, AIR-FLOWING[®] proved superior in reducing bleeding on probing (BoP) and Plaque Index (PI). In addition, AIR-FLOWING[®] led to a significant improvement in the probing depth over time.
- ▶ AIR-FLOWING[®] during GBT demonstrated a significant improvement in sites affected by moderate peri-implantitis.

