

Guided Biofilm Therapy is and remains the absolute favorite

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PEOPLE WHO WISH TO STAY HEALTHY also attach importance to their oral health and regularly go for professional prevention. Following treatment with guided biofilm therapy (GBT), over 278,000 patients worldwide were surveyed using standardized questionnaires. Of these, 94% prefer GBT to conventional methods and therefore recommend it to family and friends. Patients were also asked about their perception of pain, the time required, and the meaningfulness of disclosing.

Due to the high burden of disease, the World Health Organization (WHO) has declared oral diseases—including caries and periodontitis—as a key health problem.^{1,2} To get this under control, and in addition to a healthy lifestyle, microbial plaque (biofilm) must be removed regularly and completely. However, daily personal oral hygiene removes a maximum of 50% of the biofilm from supragingival tooth surfaces, particularly in the interdental region.³

As a second cornerstone, regular and effective professional prevention is crucial.^{4,5} For this to be successful, it must be patient-friendly and reflect current knowledge and technical progress.⁶⁻¹¹ In response to these requirements, EMS Dental developed the concept of guided biofilm therapy in collaboration with leading experts.¹² To determine the acceptance of GBT compared to conventional methods, patients of GBT-certified practices were surveyed using standardized questionnaires.

METHODS AND RESULTS

Part of the certification protocol includes GBT training of the entire practice team by the Swiss Dental Academy (SDA) and obtaining patient feedback. The anonymized responses (n = 278,258) were provided to EMS by 13,082 GBT-certified practices (as of October 31, 2023).

The questionnaire used for feedback comprises of seven questions to be rated on a scale of 0 to 5. All demonstrated a very high level of acceptance for GBT with approximately 4.7 out of a possible 5.0

points. Patients also rated the appropriate amount of time required and the absence of pain. With a percentage of 93.93%, they clearly preferred GBT to the conventional method (figure 1). 93.17% of respondents considered disclosing to be meaningful. This step in the GBT protocol ensures that biofilm has been removed completely, which is quality assurance for the patient and practitioner. The University of Zurich was involved in the further development of the questionnaire.

DISCUSSION

In conventional teeth cleaning, hard deposits are first removed using invasive sonic, ultrasonic, and hand instruments.¹³ Subsequent polishing also results in the loss of valuable tooth substance without achieving a better surface smoothness.¹⁴ In addition, disclosing is often not performed.¹⁵ By contrast, GBT first removes the biofilm which is the etiologic factor from all oral surfaces. This is performed—after obligatory disclosing—in a minimally invasive and gentle manner with Air-flowing (figure 2).¹⁶

Highest effectiveness and efficiency are demonstrated by the Airflow Prophyllaxis Master with the Airflow Max thanks to the patented Laminar technology, Perioflow and Plus Powder (figure 3).¹⁷ In case of any visible remaining hard calculus, the piezoceramic ultrasonic system (Piezon PS No Pain) is used.

Present-day well-informed patients desire prevention management that

is both effective and state-of-the-art, delivered in collaboration with the dental team on a personal level. The lack of discomfort and the positive encounter with gentle preventive care are crucial factors for fostering patient loyalty in terms of recall, and consequently, they significantly contribute to the economic success of a dental practice.

GBT has also been shown to be superior in these aspects, both in primary

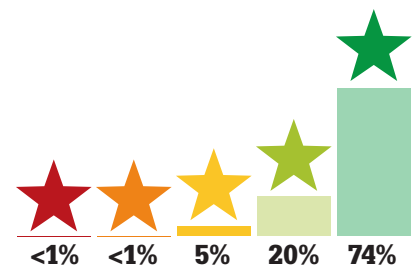


Figure 1: Patients love GBT: at 94%, the vast majority clearly prefer the systematic and risk-adapted GBT protocol (result for rating 4 or 5 stars, including 3 stars = 99.3%).

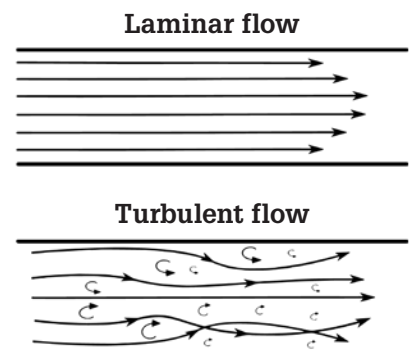


Figure 2: Only with Airflow Max (top) does the Plus powder leave the nozzle at a constant and regulated flow rate (patented Laminar Airflow technology).¹⁷ Air-flowing is the combination of Airflow Prophyllaxis Master, Airflow Max/Perioflow and Plus powder, making biofilm management both more predictable, safer, more efficient, and more comfortable.



Figure 3: State-of-the-art prevention utilizes Airflow Max: this effective and at the same time particularly gentle method is suitable for biofilm management on all oral tissues as well as on restorations, implant components, and fixed orthodontic appliances.

(PMPR) as well as in secondary and tertiary supportive periodontal therapy (SPT).^{6,7,9-11}

CONCLUSION

In summary, more than 278,000 patient surveys unequivocally affirm the widespread acceptance of the GBT protocol. This endorsement was previously substantiated in an evaluation from April 2022 (<https://gbt-dental.com/US-278k-GBTPS-1>).¹⁸ While the enthusiasm of the prevention team for GBT might influence patient evaluations (Hawthorne effect),¹⁹ the survey results align closely with findings from published studies in both dental practices and academia.²⁰ Given the diverse research inquiries and the substantial participant pool, a distinct preference for GBT over conventional methods can thus be confidently established. **DE**

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