Optimal prophylaxis with interdental brushes

An increasing number of dental professionals are emphasising the importance of interdental brushes in primary, secondary and tertiary prophylaxis. These interdental cleaners are indispensable when it comes to optimal management of interdental biofilm to maintain oral health.

In dentistry (and medicine), there are three types of prevention: primary, secondary and tertiary. Primary prevention is concerned with avoiding diseases and their causes. Four factors are important here: good oral hygiene, a healthy diet, professional preventative measures (such as fluoridation, cleaning and fissure sealing) and education. While patients are able to remove supragingival biofilm through manual plaque control, subgingival biofilm can only be eliminated by a professional cleaning. Primary prevention, especially daily oral care, forms the foundation to prevent caries, periodontal disease and other inflammation, keeping the mouth healthy. This reflects modern practice philosophy: it is best when the patient is already healthy when he or she enters the practice. This requires proper instruction in oral care, establishing good oral hygiene habits, and the use of the optimal products and techniques in perfect combination.

Secondary prevention aims to slow down the progression of disease, for example during the development of periodontal disease or peri-implant mucositis. Secondary prophylaxis diagnoses caries and periodontal disease as early as possible, proactively remineralises enamel and treats orthodontic misalignment early on. Tertiary prevention begins when tooth function has been lost. Secondary and tertiary prophylaxis are everyday matters in many Swiss dental practices, but primary prophylaxis is our ambitious aim. Owing to modern dental prevention, the team can ensure that a patient keeps his or her teeth for life. How can we achieve the best possible prophylaxis?

Modern prophylaxis encompasses the following factors and steps: recognising the patient’s individual problems in maintaining his or her oral health and his or her daily oral care habits, removing supragingival plaque and calculus, providing individual instruction on the use of oral hygiene tools, establishing a bleeding index, monitoring via radiographs, providing nutritional advice and following a fluoridation programme. Furthermore, prophylaxis individually adapted to the patient ensures the therapy’s long-term success. Properly coached oral health practitioners are indispensable.

That is where CURAPROX comes in. Individual coaching programmes with the best products, personal advice and preventative instruction for patients on how to use the oral hygiene products ensure the therapy’s success. CURAPROX products and educational concepts are the key to prophylaxis that is successful in the long run. Proper and regular use of high-quality toothbrushes, dental floss and, most importantly, interdental brushes from CURAPROX means that patients achieve complete cleaning. CURAPROX is an indispensable part of any prophylactic treatment.

Healthy gaps need care

Today, the focus of biofilm management is on the interdental area. A toothbrush only cleans around 60–70 per cent of the surface area of the teeth, the remaining 40–50 per cent being interdental surfaces and thus impossible for a toothbrush to access. From the perspective of optimised prophylaxis, CURAPROX offers the finest interdental brushes on the market, providing a more effective and gentler alternative to dental floss. The interdental brushes in the CPS prime and CPS perio lines are easy to use and long-lasting. Owing to technological innovations, CURAPROX interdental brushes are produced with long, fine bristles and very thin CURAL wires. The wire means that the bristles are very pliable, ensuring a thorough clean—even of the smallest interdental spaces. Before and after every professional tooth cleaning, the practice team should recommend the use of CURAPROX interdental brushes and thoroughly instruct patients in their use.

The fine CPS prime is ideal for closed interdental spaces. In a study titled “Efficacy of interdental calibrated brushes on bleeding reduction in adults: A 3-month randomized controlled clinical trial”, French researchers at the University of Lyon spent three months investigating whether interdental brushes could reduce interproximal bleeding in patients with gingivitis. One test group used a manual toothbrush twice a day, while the other group also used CPS prime interdental brushes. The researchers used a calibrated colorimetric probe to establish the size of the interdental spaces and therefore the correct brush sizes. The result was that interproximal bleeding was reduced by 47 per cent after one week and 71 per cent after three months.

Secondary prophylaxis just with the CPS perio

Many dental practices now offer secondary prophylaxis programmes. As soon as the active therapy phase is complete, the patient follows a specific periodontal care protocol that takes into account his or her oral health status, for example if the patient’s papillae are badly injured or if there are black triangles. Regardless of the method used in periodontal treatment, the periodontist’s work only constitutes around 30 per cent of the treatment’s success. Patients themselves are responsible for the other 70 per cent.

Cleaning interdental spaces is an intrinsic part of secondary prophylaxis. The CPS perio is ideal for periodontal patients: it

is sufficiently rigid to clean efficiently enough to contribute to secondary prophylaxis, yet soft enough to avoid causing any discomfort. Most interdental brushes do not fill the whole interdental space and are far too hard, their use resulting in pain. The CPS perio is the first choice for secondary prophylaxis. Owing to extra-long and -fine bristles, it cleans the large spaces between bridges, crowns or fillings both effectively and gently. An especially strong core is used in the CPS perio to ensure that the bristles are stable.

The practice team’s use of a calibrated CURAPROX Interdental Access Probe to determine the correct sizes of the interdental brushes needed will support patients in optimal primary and secondary prophylaxis. The chairside box for dental professionals includes pre-mounted CPS prime and CPS perio brushes, as well as Interdental Access Probes to precisely measure interdental spaces. Holders can be reused as required. All interdental brushes and probes can be hygienically and tidily stored in the treatment unit within easy reach.

In summary, CURAPROX interdental brushes with their long, stable bristles can reach and clean pockets and other critical interdental areas to prevent periodontal disease and caries. This reflects the latest understanding of prophylaxis.

Chronic Periodontitis: Probiotics as valuable adjuvants to Scaling and Root Planing

Periodontal disease is a widespread condition that affects a significant portion of Europe’s adult population. Studies show that 3 out of 4 adults develop some form of gum disease in their lifetime. A growing body of evidence indicates that Periodontal disease in its most severe form may not only severely damage the oral cavity and lead to tooth loss, but also be a risk factor for challenging systemic conditions such as diabetes, coronary artery disease and pulmonary disease. New treatment options in the form of advanced probiotics—to be administered as adjuvants to SRP—are now available to improve the long-term outcomes of Chronic Periodontal disease management.

Optimising Chronic Periodontitis treatment with probiotic bacteria. Scaling and Root Planing is the treatment of choice for Chronic Periodontitis. Yet one of the important challenges professionals face following SRP is the frequent re-colonisation of the treated niches by pathogenic bacteria, even when combined with antibiotics. By supplementing SRP with probiotic treatment, professionals can hinder this re-colonization of the oral cavity by pathogens and allow their patients to profit from the antimicrobial and anti-inflammatory properties of oral probiotics.

Lactobacillus reuteri Prodentis: an advanced and clinically validated probiotic.

Lactobacillus reuteri Prodentis is an advanced probiotic bacteria of human origin, adapted to reside in the oral cavity and able to bind to saliva and oral mucosa. Lactobacillus reuteri Prodentis is composed of two patented strains of lactic acid with two complementary modes of action. Together, the two strains have been clinically proven to delay the re-colonisation of pathogenic bacteria in cavities treated via SRP. Lactobacillus reuteri Prodentis has been shown to significantly improve critical clinical parameters, reducing Plaque Index, Gingival Index, Bleeding on Probing, Probing Pocket Depth and increasing Clinical Attachment Level in deep pockets. Lactobacillus reuteri Prodentis has also been shown to reduce the risk of Periodontitis disease progression, the number of sites in need of surgery, the number of Periodontal pathogens and to deliver long-lasting clinical improvement in Chronic Periodontitis.

Sunstar, a global leader in oral health, brings you oral care solutions boosted by Lactobacillus reuteri Prodentis.

A list of references can be obtained from the publisher.
Oral-B has a long and rich history of being a true partner to dental professionals. We are proud of our 69 years of consecutive innovation and continued mission to improve the population’s gingival health since our establishment by a periodontist in 1949.

Periodontal disease is among humanity’s most common diseases. It affects up to 50 per cent of the global population, despite being largely preventable through good oral hygiene and preventative policies addressing common risk factors.\textsuperscript{1,2}

Oral-B is the global leader in the toothbrushing market. Part of Procter & Gamble, the brand includes toothbrushes and toothpastes for both children and adults, oral irrigators and interdental products such as dental floss. Oral-B’s rechargeable oscillating-rotating electric toothbrush, with its iconic round brush heads, has been validated consistently externally and internally by clinical research. Through decades of innovation and clinical research by Procter & Gamble, its stabilised stannous fluoride toothpastes have been shown to reduce gingival problems and provide protection from erosive tooth wear by creating a protective shield on teeth against acids.

Procter & Gamble is a founding supporting partner of the Global Periodontal Health Project led by the FDI World Dental Federation. Over the course of three years (2017–2019), the project aims to reduce the burden of periodontal disease by raising awareness of its impact and of effective strategies and preventative measures to control the disease.

A list of references can be obtained from the publisher.

---

**TePe interdental brushes—25 years of high-quality oral hygiene**

The first TePe interdental brushes were launched in 1993 with the same aim they have today: preventative oral hygiene for everyone. Today, 25 years later, the company celebrates worldwide success, with its interdental brushes being its leading product.

Odontological research has shown that using an interdental brush regularly is an efficient method to keep gingivae and teeth healthy. Good oral health contributes to good overall health.

“General health awareness has increased over the past several years, and today, we see a broader understanding of how oral health is linked to general health. In that context, TePe’s high-quality interdental brushes fit perfectly as part of people’s healthy oral care habits,” said Dr Anna Nilveus Olofsson, Manager of Odontology and Scientific Affairs at TePe. TePe’s industry-leading interdental brushes are recognised worldwide for their high-quality and efficiency. The original TePe interdental brush range includes nine colour-coded sizes to fit narrow and wider interdental spaces. Through the years, the interdental brush range has been complemented with two additional variants, one with softer filaments for sensitive gingivae and one with an angled brush head and a longer handle for easier access between posterior teeth. The four smallest sizes of the original TePe interdental brush have a flexible neck for even better access.

Over five decades, TePe has evolved from a small-scale Swedish company into a high-tech enterprise with distribution in 60 countries. Based on the vision of healthy teeth for everyone throughout life, TePe continues to develop innovative products and raise awareness of the importance of preventative oral care. The company’s close partnership with the dental profession has been fruitful ever since its founding in 1965, resulting in a wide range of high-quality oral hygiene products. All production takes place at its headquarters in Malmö in Sweden.

---

**mission to improve the population’s gingival health**

**Dedication to innovation and partnerships with dental professionals**

Oral-B has a long and rich history of being a true partner to dental professionals. We are proud of our 69 years of consecutive innovation and continued mission to improve the population’s gingival health since our establishment by a periodontist in 1949.
Our story begins almost 50 years ago, in 1969. Researchers of the day knew that saliva was rich in enzymes and proteins that could protect against infection and disease. They had already shown that lactoperoxidase played a part in saliva’s ability to inhibit bacterial growth. This inspired Dr Henk Hoogendoorn, a Dutch microbiologist, to investigate the lactoperoxidase enzyme system. He demonstrated that the enzymatic reaction led to the production of hypothiocyanite by hydrogen peroxide and that hypothiocyanite had a natural antibacterial effect against Streptococcus mutans in plaque.

Hoogendoorn believed that a toothpaste containing the right combination of enzymes and proteins could boost the mouth’s natural antibacterial system. Over the coming years, Hoogendoorn collaborated with other scientists to investigate the potential of different enzyme and protein combinations in toothpaste. His formula was refined and tested until he found the optimum balance: a ground-breaking toothpaste called Zendium. It is only now with scientific advances, including next-generation genomic sequencing, that we are able to discover so much more about how Zendium works and the positive effect it has on the bacterial species in the mouth.

A landmark microbiomics study published in 2017 showed that Zendium significantly increased gingival health-associated bacteria and reduced periodontal disease-associated bacteria in gingival plaque, resulting in a healthier gingival plaque microbiome. The clinical benefits of this microbial shift were demonstrated in two further studies, presented at the 2017 meeting of the Continental European and Scandinavian divisions of the International Association for Dental Research, that showed that Zendium users had significantly better gingival health.

Zendium now contains natural enzymes and proteins reflecting some of those found in saliva. Zendium’s triple-enzyme system of amyloglucosidase, glucose oxidase and lactoperoxidase works in a cascade to boost the levels of hydrogen peroxide in saliva and catalyse the formation of hypothiocyanite. Zendium also contains three other ingredients: lysozyme, lactoferrin and colostrum, as a source of immunoglobulin G, which can be found naturally in saliva and work in harmony with enzymes to protect the mouth naturally.

Zendium contains standard levels of fluoride (1,450 ppm as sodium fluoride) for effective protection against caries and contains no sodium lauryl sulphate, offering a gentle approach to oral care that is suitable for all patients.

Today, Zendium is the number 1 trusted brand in Scandinavia. Our goal is to continue to enhance our understanding of the mouth’s natural defences, deliver products that boost the protective power of saliva and promote all-round oral health.

For more information, visit www.zendium.com.