How to put **prevention** into practice

When patients meet Sirid Kulka, their lives will be changed completely. They will find out how strong the link between a strong immune system and oral health really is. They will also discover that most health problems can be avoided if dentistry, medicine and natural therapies worked together better. What’s more, they will learn about a new process that could considerably minimise the accumulation of plaque.

**Prevention** was invited by Andreas Teichmann, the developer of the Dentcoat technology, to speak with Sirid Kulka, an advocate of preventive dentistry who gives the patient just as much ownership as the dentists who are in charge of their treatment. She believes that patients who sit in the chair and expect to be cured immediately will become unwell in the future.

Mrs Kulka, tell us a bit about your interdisciplinary network and meetups.

Kulka: Medicine is in my blood. Both my parents and my brother are also in medicine. I’ve always been interested in the links between different disciplines. At some point, the idea of a meetup arose and now it takes place several times a year. I’m also a member of an interdisciplinary network that meets regularly. Both groups welcome medical doctors, dentists, natural practitioners and therapists. We all see the prevention of illness as the most important aspect of our jobs. For example, I can often see in the patient’s oral tissue if he or she is coming down with something, or if they’ve been ill. Based on this, I can make certain treatment recommendations. In turn, my colleagues see other things that can help me with my treatments.

At the same time—and I’m very happy about this—I’ve learned so much more about holistic correlations thanks to these meetups. We work in a complementary way, which often lets us establish the patient’s root problem. This could be physical, immunological or even osteopathic. Classic dentistry would often have met its limits in these cases.

Dental medicine is constantly developing and many dentists are hardly keeping up with new technologies and practices. Should they be interested in interdisciplinary approaches despite of this, or because of this?

Teichmann: Doctors must ask themselves, what will lead to long-lasting results? It is absolutely correct that a patient with a systemic illness does not expect their dentist to approach their treatment from an interdisciplinary perspective. And not every doctor likes to share the healing process with his or her colleagues. However, an internist for example should consult a periodontist when dealing with intestinal absorption to assess the periodontal status. Interdisciplinary approaches are indispensable nowadays.

Kulka: We did not really learn about interdisciplinary approaches when we were studying dentistry. Dental training is comprehensive, but you can, and should, be able to identify important correlations in your practice. We have to question existing therapies and always evaluate them considering new scientific knowledge. The key is interdiscipli-
nary and complementary collaboration between dentists, doctors, natural practitioners and therapists.

Why did you opt for preventive dentistry? And did you know from the start that your practice would focus on prevention?

Kulka: For me, it was a gradual process, since prevention reflects a lot of experience. It all began with periodontitis and treatment methods that did not really convince me. After all those years, the results of treating periodontitis were disappointing for me—and I can hardly even call them results. So, I asked, what is the alternative if I am not able to completely cure periodontitis? I prevent it. This approach works well when it comes to tooth decay, but we still need to work on periodontitis prophylaxis.

What does prevention mean to you personally?

Kulka: For me personally, there are three approaches to prevention. Firstly, I want to primarily avoid illnesses and their causes. Treatment is better when the patient is healthy. The second approach is stabilisation. For example, after we have achieved a satisfying therapeutic result, whether the problem is completely cured or not, we have to maintain the health status of the patient. The third approach is about preventing recurrence when we see the patient again. Prevention is applicable to patients of all age groups from the age of three. However, prevention in younger children involves also training the parent, establishing or developing an awareness of health and creating the foundations for well-informed children. Prophylaxis training can work well in a group setting, but long-lasting success and motivation are only derived from individual training and education.

Teichmann: I believe prevention would greatly unburden the healthcare system. It allows us to treat the people who really need help and require intensive therapy.

Why are some dentists shying away from comprehensive peri-prophylaxis?

Kulka: If you want to understand peri-prophylaxis, you have to understand the immune system. A perfect immune system masters attacks and tolerance. Dentistry has to compare periodontitis, as an invisible chronic illness, with coronary heart disease, diabetes and Chron's disease. Then the question arises: Can we even treat periodontitis locally, or is it more of a systemic problem? Well, I would say it is a systemic problem. I need partners from microbiology and medicine in order to treat periodontitis holistically. I believe therapy and prevention can only be successful together.

Teichmann: Understanding oral microbiology is more important than ever. We have to pay much more attention to our internal flora. Bacteria live in us and we are alive thanks to these bacteria. Therefore, we have to check that our oral flora and intestinal flora are balanced. When our oral flora is out of balance, it has an effect on the rest of the body. So, we have to stabilise the oral flora.

The prevention trend benefits the patient most of all. Many patients want to keep their teeth and have become more aware of their own health. However, a lack of motivation is often the problem.

Kulka: That’s exactly why I take the patient seriously. In my team, the patient is the boss—they decide when they need a break. They also decide if they are ready to give up smoking, for example. Together, we come up with specific tasks for the patient to do at home. If you give your patient the ability to make decisions, you are also motivating and involving them. That is what prevention is all about: motivation, training and constant support. For example, I offer smokers a tailored prevention programme with a check-up session every two months.

Prevention takes time, but not every dentist gives him- or herself, and the patient, enough time for diagnosis. And,
periodontitis can easily be diagnosed nowadays.

Kulka: When I see inflammation or bone loss, I have two options. I can either treat according to the old method or I can find out why it happened in the first place. I have a basic diagnostic schematic that involves taking a holistic patient history. Then the patient is informed about which tests they need or whether a biopsy is necessary. The financial side of things, however, is not taken into account, to be honest. However, we do have a step-by-step plan with a range of options. I spend almost an hour with the patient for diagnostics and therapy suggestions. In order to strengthen communication, we also colour code everything, both before and after the biofilm treatment!

So now we have come to biofilm management, a central factor in prophylaxis. This approach relies on a long-lasting treatment strategy with Dentcoat, a SiO2 complex. Dentcoat reduces the pathogenic biofilm so that almost no germs are able to settle. How does that work exactly?

Teichmann: Biofilm can be affected by the metabolism—if I can support the good bacteria, I have already achieved a lot. For example, a patient with exposed tooth roots has a very rough surface. Dentcoat is then used as a bio-repulsive structure. “Bio-repulsive” is a term from molecular medicine, meaning that the silica complex is diffused into the deep layers of the dental enamel. This creates a protective layer and reduces the enamel’s acid solubility.

This remineralisation requires a plaque-free surface, therefore, the procedure requires a professional cleaning. Remineralisation is only possible when I keep the surface free from plaque, so that bacteria cannot settle on the surface. The results are clear: no cavities and no periodontal illness, because it removes the microbiome’s ability to change. This means that we have further expanded Dentcoat’s indication spectrum. Today, we can use the complex for dental protection, periodontal illness and tooth decay, sensitive teeth or even white spots. And with Implantcoat, we now have a reliable preventive measure for peri-implantitis.

Kulka: I’ve been working with Dentcoat for a few years now and I am very happy to have this treatment option in my practice. Dentcoat has both therapeutic and preventive qualities. After a professional teeth cleaning, we use Dentcoat to reduce the affected area of the tooth. When used regularly, we can also balance oral flora and whiten the affected tooth. At first, you just see biofilm everywhere, then after a while there is just about 30 per cent and then, at some point, you only see minimal plaque accumulation. Dentcoat helps with prophylaxis and PA therapy, so it is part of a treatment system.

I ask patients to come to the practice every two months if they have heavy staining, so I can clean their teeth and apply Dentcoat. Prophylaxis is not just about having a professional teeth cleaning twice or four times a year, it is rather about the level of plaque accumulation. When I apply Dentcoat, I see long-lasting results and plaque returns slowly. Dentcoat does not just stabilise periodontal results, but also decreases the risk of tooth decay. Plaque reduction also allows teeth to remineralise. With Dentcoat, I can inhibit and reduce inflammation and it also keeps the oral health status stable.