Implant prophylaxis

Professional implant prophylaxis can easily be integrated into everyday practice, say Dirk Grünewald and Tamara Gellert





To maintain healthy teeth for life, regular and individually tailored prophylaxis routines help patients avoid oral disease and its related treatments. An implant has an altered resistance and requires exceptional care, as both its surface and anchoring differ from the natural tooth.

In our 'World Member of Leading Implant Centers' practice, we specialise in the All-on-4 treatment concept from Nobel Biocare – providing edentulous and soon-to-be edentulous patients that have substantially reduced residual dentition with a fixed full-arch prosthesis within just one day – whilst also focusing on the meticulous aftercare.

After placing the implant and for the first two years we routinely implement a three-monthly recall for every implant patient in order to prevent the development of mucositis or peri-implantitis. According to Professor Dr Frank Schwarz of Düsseldorf, the prevalence of peri-implant inflammation is currently at 43% for mucositis and 22% for peri-implantitis.

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The causes of the gradual inflammation are multifactorial and include both local factors such as oral hygiene and the state of the soft tissue or marginal periodontal disease, as well as systematic factors such as diabetes – referring to the patient's dental and medical records could be beneficial. All of these factors can become a risk for the long-term success of an implant.

Looking at the daily prophylaxis routine in our practice, the risk factor of smoking in particular has an increased prevalence. Therefore we advise all our implant patients, as part of our pre-implant consultation process, that smoking increases the risk of long-term implant ineffectiveness. Our aim and objective is to convince patients to either stop smoking or to at least reduce the consumption rate on a permanent basis.

In summary, every implant patient carries the risk

of an inflammation, but that's what drives our team to prophylaxis, ensuring the best practice for the longterm success and lasting health of the implantsurrounding soft tissue.

Non-abrasive

As part of our implant prophylaxis, in order to thoroughly clean the implant necks we have previously used a synthetic scaler, followed by a powder blast tool. However, for the past six months we have been using the Komets Piezoline implant ultrasonic prophylaxis tip (SF1982), which perfectly fits on our EMS handpiece.

The disposable polymer pin is easily and safely screwed onto the tip holder, 1981.EM1. The flat side of the instrument is used to work thoroughly, in grazing movements, from distal to mesial. The sharp side of the instrument sits ergonomically against the implant neck.

The polymer pin has a cooling spray dispensing slot to ensure sufficient cooling. To date the feedback from our patients with regards to using the SF1982 is very positive.

Sign

Based on the clinical peri-implantitis diagnosis, an advanced and systematic implant prophylaxis approach is implemented. Using the polymer pin SF1982 the symptom-free implant is carefully cleaned to a sub-mucosal depth of 1-2mm. Stains and soft deposits can be removed with glycine powder, using the powder blast airflow tool. The polishing afterwards is performed with a rubber cup and a non-abrasive fine polishing paste. The application of a 1% chlorhexidine gel is the final prophylaxis step for the healthy implant.

If, however, there are any signs of inflammation or visible infection (discharge of pus) during the manual palpation of the peri-implant, soft tissue probing with a synthetic probe is essential, and depending on each individual diagnosis, the implant dentist will implement the best possible mucositis or peri-implantitis treatment. Without question, both the implant consultation and the demonstration of adequate, individually tailored home

care are key elements during our prophylaxis session.

The implant prophylaxis tip can also be used in deeper pockets for the mucositis treatment, during the different stages of peri-implantitis, all the way to the open flap procedure. It also demonstrates great performance on metals and ceramics.

Trying to ultrasonically remove calculus below a barconnected implant requires some practice, because the recommended tangential angle cannot always be used. Nevertheless, although this is not the typical application for using the SF1982, we found that by using the ultrasonic tip below a bar connected implant, hard deposits loosened, making it easier to remove deposits afterwards with a hand instrument or floss.

Outcome

Generally speaking, plaque builds up a lot faster on rough surfaces than it does on smooth ones. The SF1982 ensures a non-abrasive removal of calculus, which means that there is no roughening of the implant neck area. A technical inspection indicates that the polymer pin can't damage the implant surface. The result is a perfectly smooth structure, which makes re-deposition of plaque difficult.

Therefore, the SF1982 offers an excellent solution to avoid the dreaded inflammation around the implant, safeguarding the long-term success of our work. D



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