Evaluation of a tooth gel with Curolox®-Technology as part of professional tooth-cleaning, with regards to patient satisfaction and the effects of hypersensitivity

A single-centered, uncontrolled post-marketing study

Petra Müller1, Rolf Heimlinger1, Ariane Lukic1, Thomas Zumstein1, Claudine Bommer2
1 zumstein dental clinic, Luzern/Switzerland; 2 credentis, Windisch/Switzerland
contact: info@zumstein-dental-clinic.ch

1 Introduction
For general tooth-care and especially the treatment of tooth hypersensitivity, patients and dental professionals today have a broad choice of products at their disposal. The tooth gel Curodont Protect based on the patented Curolox-Technology offers a new biological approach. It contains a fibrous matrix formed by the self-assembling peptide P11-4 [1]. With the application of the gel on the tooth's surface, this matrix forms a protective barrier against acid attacks [2] and inhibits stimuli through occlusion of exposed dentine tubules, while promoting remineralization by supplying fluoride and calcium phosphate.

The aim of the present study was to evaluate patient satisfaction after application of Curodont Protect on the one hand and occlusion of exposed dentine tubules, while promoting remineralization by supplying fluoride and calcium phosphate.

2 Methods
A: Professional tooth-cleaning
B: Patient’s consent by survey
C: In the case of approval – the participant fills out a questionnaire BEFORE treatment
D: Application with Prophylaxis-calyx on all teeth
E: Home use
H: Evaluation of the survey
G: Return of the questionnaire
F: Participants fill out the questionnaire 14 days AFTER the first treatment

3 Result (Continuation)

3 Results
• A total of 90 participant feedbacks were evaluated (0–46 years). 44 participants had pain-sensitive teeth.
• Participants with sensitive teeth mostly reacted to several stimuli: 75% to cold temperatures; 43% to brushing teeth; 25% to acid-contacts; 11% to heat.
• The taste and feeling of the tooth gel was evaluated as «good and pleasant» by 93% of all participants.
• The general patient acceptance of the tooth gel was positive: 76% of the participants with insensitive teeth recommend the tooth gel after a PZR.

3 Conclusions
The prophylaxis tooth gel Curodont Protect is accepted by patients and in most cases clearly shows a pain-relieving ability in case of dental hypersensitivity.

4 Discussion
The results show a good patient acceptance as well as a pain-relieving ability in case of dental hypersensitivity. The tooth gel contains Saccharin; this explains why patients with sensitive teeth, who experienced more intensive pains after the treatment (5%), all mentioned to be sensitive to sweet. The next step is to test this tooth gel based on the Curolox-Technology in comparison to similar products (e.g., Pro-Argin or Novamin Technology) in a more wide-spread and controlled study.

Other important parameters to be considered are the influence of brushing teeth as well as the lasting of effects.

5 Conclusions
The prophylaxis tooth gel Curodont Protect is accepted by patients and in most cases clearly shows a pain-relieving ability in case of dental hypersensitivity.

Literature