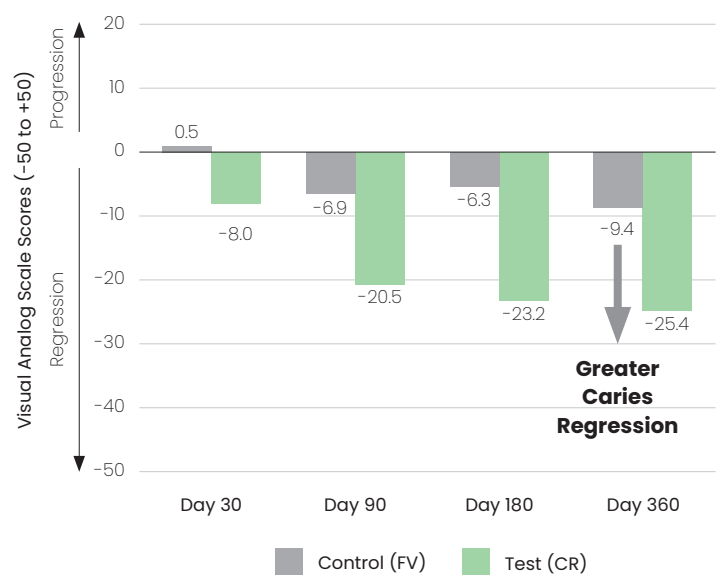
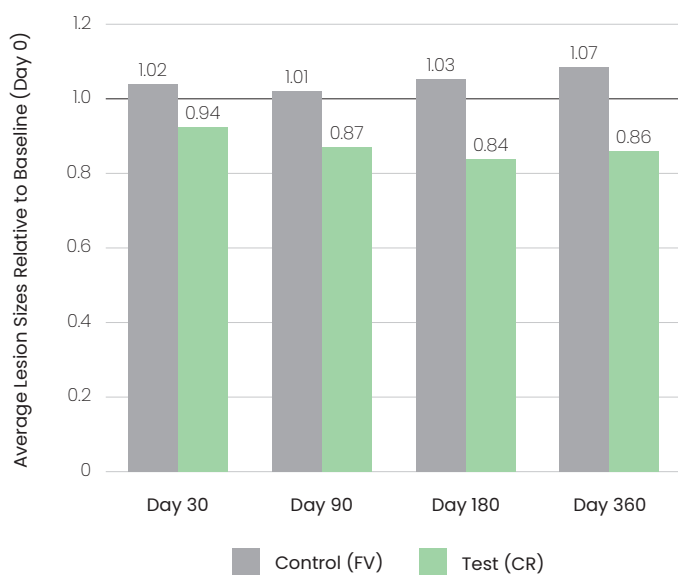




Significantly Greater Caries Regression with Curodont Repair (CR) than with Fluoride Varnish (FV)

RESULTS

On both objective (blinded morphometric assessment) and subjective (visual analog scale) assessments, the sizes of early carious lesions treated with CR decreased steadily (indicating caries regression) while lesions treated with FV remained stable, with a significant difference between the groups at all visits. The regression was majorly seen in the first 3 months after a single application of CR.



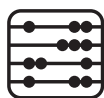
Blinded morphometric assessment revealed that relative to Day 0, the average sizes of lesions treated with CR steadily reduced while the sizes of those treated with FV remained stable, with a significant difference between the groups at all visits ($P=0.001$).

More rapid and greater decrease in VAS scores, indicating greater caries regression, seen in lesions treated with CR than in those treated with FV (VAS scale: Negative score: caries regression; '0': No change; Positive scores: caries progression).

STUDY ESSENTIALS



36 Patients with 88 Early Carious Lesions



Randomized, double-blinded, controlled, split-mouth clinical trial



12 Months



Aachen, Germany

How can you use these results in your practice?

Once you detect an early, active carious lesion, a single application of CR is enough to enable its regression, which can be observed both visually and on radiographs. Due to a 'fan-shaped' arrangement of the new hydroxyapatite crystals as opposed to the parallel arrangement in natural enamel, the 'whitish appearance' of early buccal caries may reduce to a great extent but may not completely disappear. Thus, early detection and then immediate treatment using CR ensure the greatest probability caries regression and complete esthetic recovery.

STUDY INFORMATION

Title: Randomized clinical trial investigating self-assembling peptide P11-4 in the treatment of early caries*



Products Tested: • Curodont REPAIR (CR)
• Fluoride Varnish (FV)



Scope & Methodology: The efficacy of CR in treating early buccal carious lesions was compared with that of the current gold standard FV over a 12-month period. Assessments were done at day 0, day 30, day 90, day 180, and day 360 using the following techniques:

- Change in white spot lesion size: Standardized photographs (morphometry)
- Caries progression/regression: Visual analog scale (VAS)

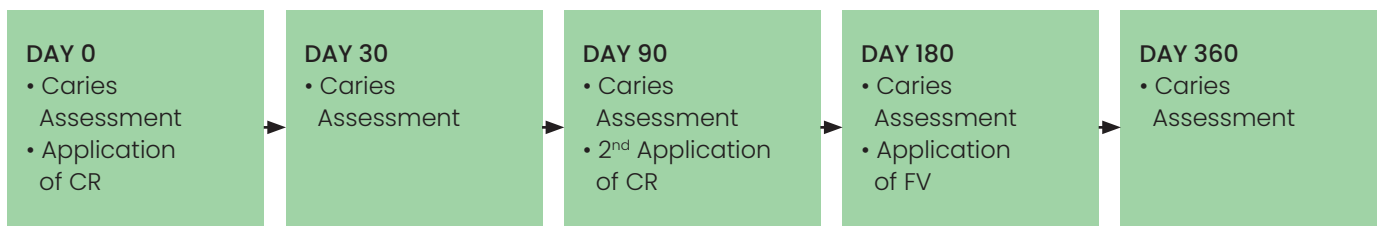


Study Participants: 36 participants (13-65 years), each having at least 2 teeth with early buccal caries. A total of 88 early carious lesions (44 tooth pairs) were studied.

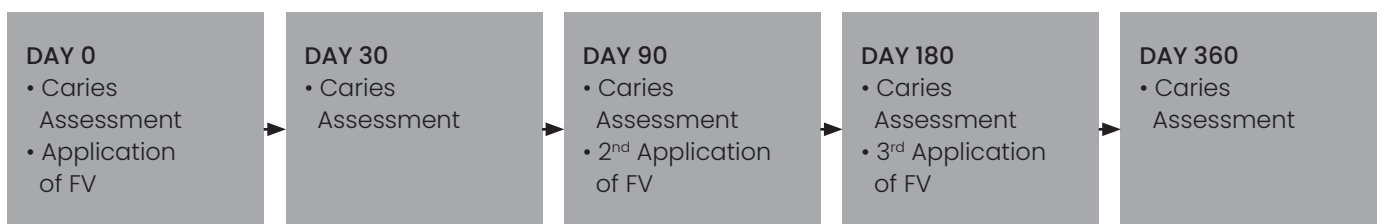


Procedure: In each tooth pair, one tooth received treatment with CR (test) and the other, with FV (control).

Test Group



Control Group



Conclusion: Biomimetic enamel regeneration enabled by CR is a non-invasive, painless, and quick treatment to promote regression of early carious lesions and is significantly superior to the current gold standard FV.

Reference

*Bröseler F, Tietmann C, Bommer C, Drechsel T, Heinzl-Gutenbrunner M, Jepsen S. Randomised clinical trial investigating self-assembling peptide P11-4 in the treatment of early caries. Clin Oral Investig. 2020;24:123-132

Supporting Studies

- ¹ Doberdoli, D. et al (2020) "Randomized Clinical Trial investigating Self-Assembling Peptide P11-4 for Treatment of Early Occlusal Caries" Scientific Rep
- ² Alkilzy M, Tarabaih A, Santamaria RM, Splieth CH. Self-assembling Peptide P11-4 and Fluoride for Regenerating Enamel. J Dent Res. 2018 Feb;97(2):148-154.
- ³ Sedlakova Kondelova P, Mannaa A, Bommer C, Abdelaziz M, Daeniker L, di Bella E, Krejci I. Efficacy of P11-4 for the treatment of initial buccal caries: a randomized clinical trial. Sci Rep 2020;10:20211