

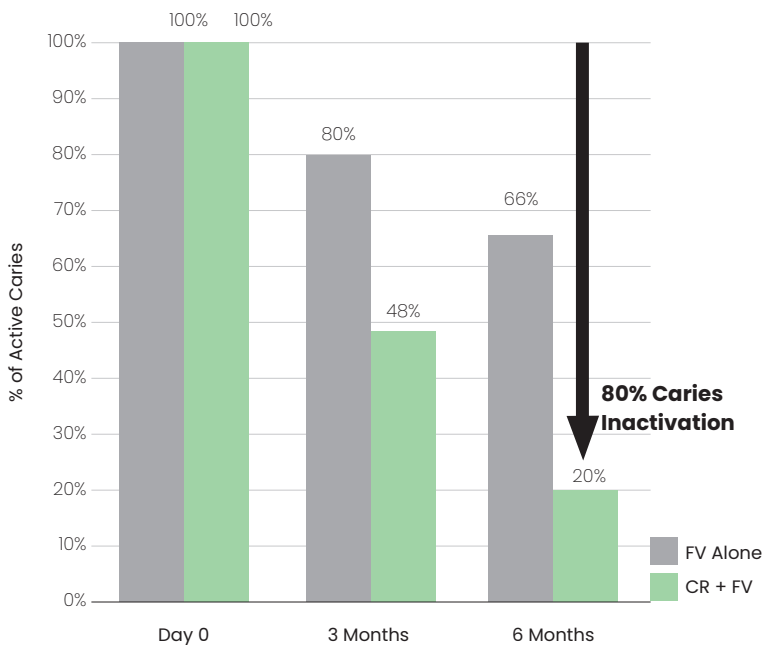


Significantly Superior Inactivation and Regression of Early Caries with the Combination of Curodont Repair (CR) and Fluoride Varnish (FV) Compared to FV Alone

RESULTS

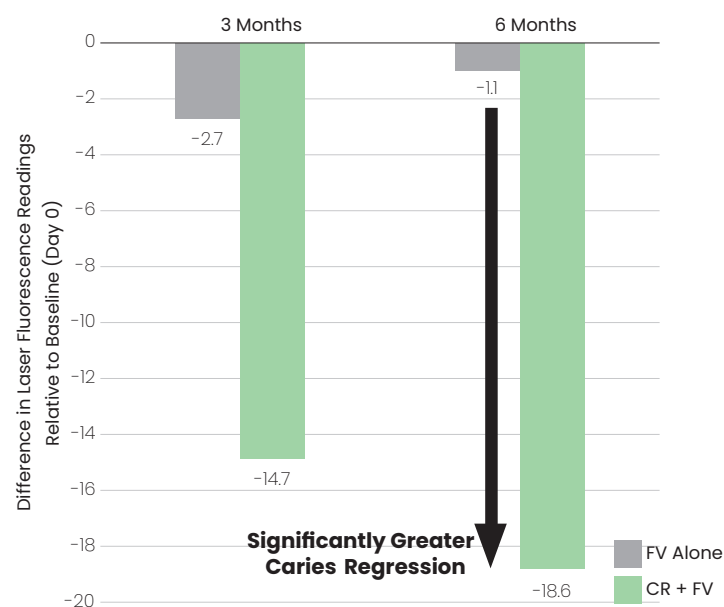
After 6 months, treatment with Curodont Repair and Fluoride Varnish (CR+V) showed significant and consistently greater caries regression than that seen after treatment with Fluoride Varnish (FV) alone, as per both objective (laser fluorescence) and subjective (Nyvad activity criteria) assessments. CR+V also resulted in significantly greater caries inactivation (80%) than that seen with FV alone (34%).

Caries Inactivation



After 6 months, 80% of caries treated with CR+V became inactive as opposed to only 34% of those treated with FV alone, as assessed by Nyvad Caries Activity Criteria.

Caries Regression

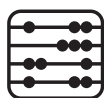


Greater decrease in laser fluorescence readings (assessed using DIAGNODent), signifying greater caries regression for treatment with CR+V compared to FV alone.

STUDY ESSENTIALS



70 Children With Early Active Occlusal Caries on Erupting Permanent Molars



Randomized Single Blinded



6 Months



University of Greifswald, Germany

How can you use these results in your practice?

You can treat early, active caries in an easy, 8-10 minute, non-invasive, and pain-free protocol with CR. If needed, FV can be applied 5 minutes after CR. The combination of CR and FV leads to significantly higher arrest and regression of early caries than FV alone. Enamel regeneration with CR offers a predictable 'middle-ground' solution for early carious lesions that are frequently either left untreated ('wait-and-watch') or prematurely 'drilled-and-filled'.

STUDY INFORMATION

Title: Self-assembling peptide P11-4 and fluoride for regenerating enamel*



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



Scope & Methodology: The efficacy and safety of CR in combination with FV was compared with that of FV alone in producing regression of early carious lesions over a 6-month period. The assessments and techniques employed were as follows:

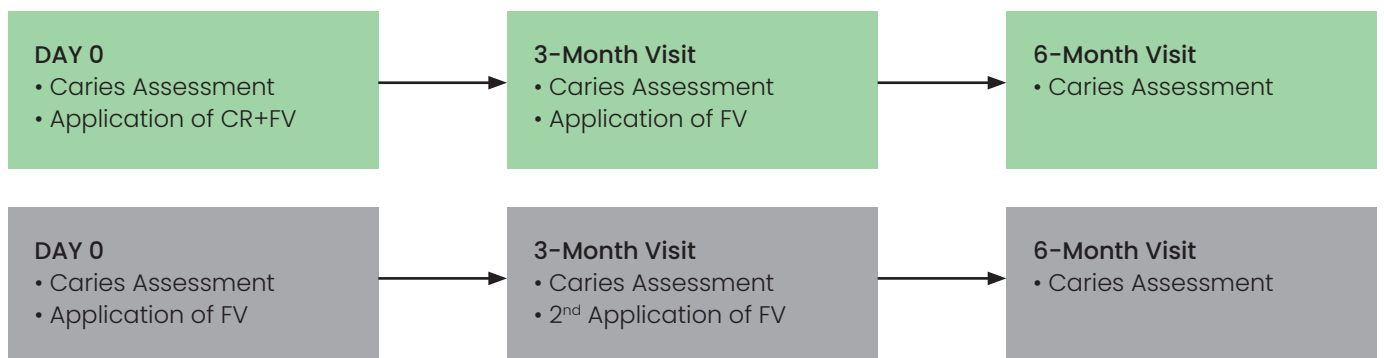
- Caries progression/regression: Laser fluorescence
- Caries activity: Nyvad Caries Activity



Study Participants: 70 children (age: 7-13 years) with active, occlusal, early carious lesions (ICDAS II score: 1-3) on first and second erupting permanent molars.



Procedure:



Conclusion: Biomimetic mineralization facilitated by CR in combination with FV is a simple, safe, and effective non-invasive treatment for early carious lesions and is superior to the present clinical gold standard of FV treatment alone in enhancing caries inactivation and regression.

*Reference

• 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.

Supporting Studies

- Bröseler, F. et al (2019) "Randomised clinical trial investigating self-assembling peptide P11-4 in the treatment of early caries." Clin Oral Invest
- Brunton, PA, et al, (2013) "Treatment of early caries lesions using biomimetic self-assembling peptides – a clinical safety trial" Brit Dent J, 2013, 215: E6
- Doberdoli, D. et al (2020) "Randomized Clinical Trial investigating Self-Assembling Peptide P11-4 for Treatment of Early Occlusal Caries" Scientific Rep