

Charisma® Diamond

Class I and II cavities – LMU Munich

Clinical evaluation of Charisma Diamond in posterior cavities (18 months).

In an 18 months clinical study, the Department of Restorative Dentistry of the Dental School at the Ludwig-Maximilians-Universität (Munich, Germany) evaluated the clinical performance of the new nano-hybrid composite Charisma Diamond. Charisma Diamond exhibits excellent results in this clinical trial.

Giving a hand to oral health.



KULZER
MITSUI CHEMICALS GROUP

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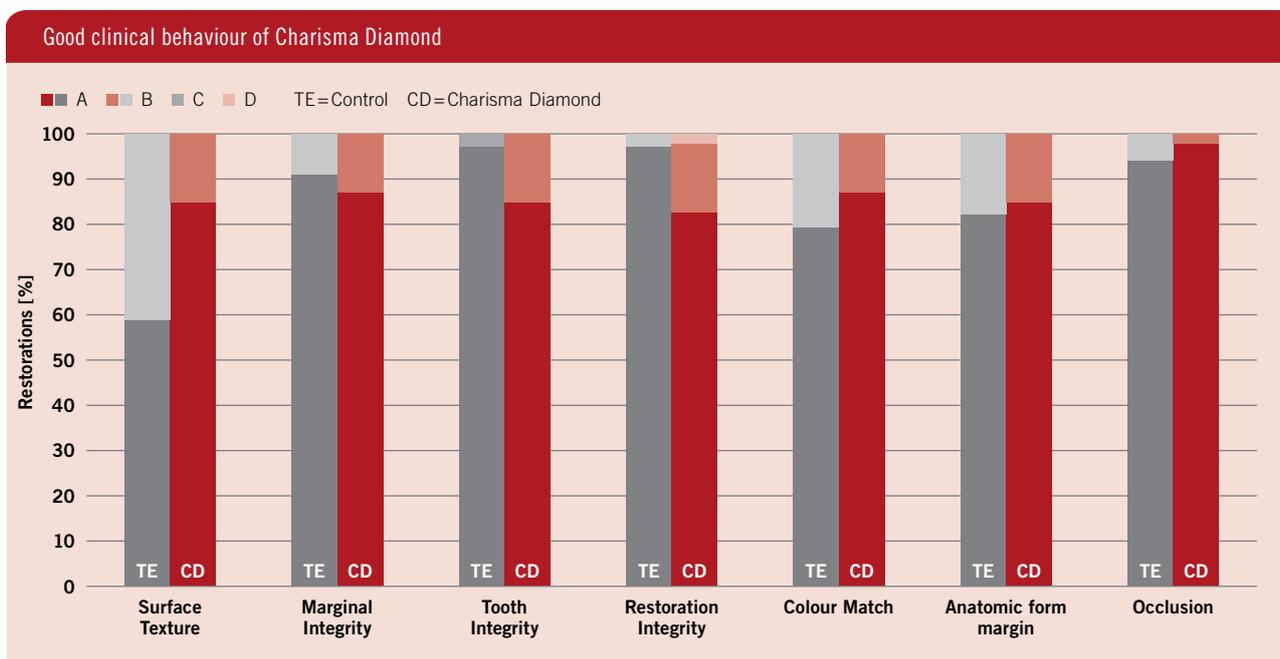
Objective

Determination of the clinical performance of two nano-hybrid composites.

Materials and Methods

48 Charisma Diamond and iBOND Self Etch (both Kulzer) and as control group 50 Tetric EvoCeram (Ivoclar Vivadent) and Gluma Comfort Bond (Kulzer) class I and II restorations were placed by three dentists in 71 patients. Clinical assessment at baseline and 18 months was done by two independent dentists using USPHS criteria (Surface texture, colour match, anatomic form surface, anatomic form marginal step, marginal integrity, marginal discolouration, tooth integrity, restoration integrity, occlusion, sensitivity, post-op symptoms). After 18 months 46 Charisma Diamond and 34 Tetric EvoCeram restorations were available for investigation. Statistic calculations were done by a Mann-Whitney-U-test ($p < 0.05$).

Results



One Charisma Diamond and one Tetric EvoCeram restoration had to be replaced until the 18 months recall. All teeth were vital and none of the patients reported postoperative symptoms. Charisma Diamond showed a significantly better surface texture ($p = 0.01$; MW U-test). Fisher's exact test showed no significant differences between Charisma Diamond and Tetric EvoCeram concerning the failure rates ($p > 0.05$).

Conclusion

Up to 18 months, the clinical performance of Charisma Diamond and Tetric EvoCeram exhibits excellent results.

Source

Manhart J, Thiessen D, Ern C, Litzemberger A, Okuka A, Rohmer J, Hickel R: Clinical evaluation of Charisma Diamond in posterior cavities (18 months) J Dent Res 90 (Spec Iss C), 151569, 2011.

The study was abbreviated and summarised and all diagrams and titles have been established by Kulzer. Charisma Diamond is chemically equivalent to the originally evaluated composite. Charisma is a registered trademark of Kulzer.