SCIENTIFIC REPORT

Bifix QM – Microtensile strength on ceramic

VOCO GmbH, Knowledge Communication Department

Anton-Flettner-Str. 1-3 D-27472 Cuxhaven, Germany

Tel.: +49 (0)4721-719-1111 Fax: +49 (0)4721-719-109

info@voco.de www.voco.com



The microtensile strength of the combination of Futurabond DC and Bifix QM luting system on two different ceramics was ascertained in a study at the University of Halle-Wittenberg. In addition to light-curing, pure chemical-curing was also evaluated.

The adhesion was determined under simulation of natural perfusion^[2] in this study^[1]. Cercon (zirconium oxide ceramic) and Empress (lithium disilicate ceramic) were used as ceramics, and both pure chemically and light-curing were carried out. The results of the measurements are shown in Figure 1.

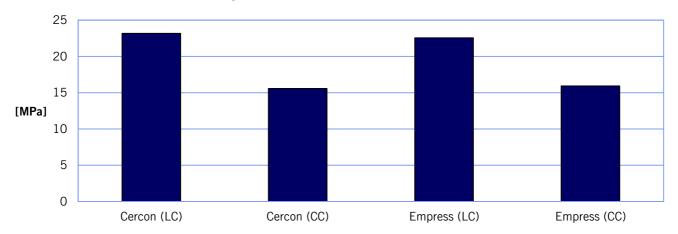


Figure 1: Microtensile strength [MPa] on Cercon and Empress (LC = light-cured, CC = chemically cured)

The adhesion values are outstanding on both materials, and chemically curing also achieved a secure bond in the areas inaccessible to light.

Conclusion: The combination of Futurabond DC and Bifix QM is a safe way to permanently mount ceramic restorations.

[1] T. Mohs, P. Wappler, K. Bekes, H.-G. Schaller, C. R. Gernhardt, *Int. Poster J. Dent. Oral Med.* **2008**, *10*, Poster 407. [2] C. R. Gernhardt, H. G. Schaller, A. M. Kielbassa, *Am. J. Dent.* **2005**, *18*, 318-22.

