Sticks to the teeth – not the instruments

The direct restoration of multiple defects, in particular old restorations with secondary caries, places considerable demands on both the clinician and the materials.

By Dr. Ralph Schönemann, Germany

Compared with indirectly fabricated restorations, the effort is considerably less, as these generally require a temporary restoration as well as a second treatment session following conventional impression-taking. The fabrication of individual full ceramic restorations after optical scanning and subsequent automated fabrication is, of course, a single appointment alternative, does however, require investment in this technology. A prerequisite for the successful, direct preparation of restorations with purely light-curing composite materials in the layering technique, is avoiding tension during volumetric shrinkage which occurs during polymerisation.

The adhesives and hybrid composites should be compatible with each other and offer good long-term performance. This is reflected both in vitro tests as well as in vivo long-term studies.

Sticks to the teeth and not the instruments. One of the requirements for state-of-the-art adhesives and composites is safe handling during the preparation of the restoration. This implies a good, uniform wetting layer when applying the adhesive and convenient modelling properties of the hybrid composite which allow the clinician safe adaptation to the bonded teeth.

Submicron hybrid composites offer an impressive rapid and consistent gloss. Appropriate shades and an easy to achieve gloss due to intelligent filler design provide the desired and sustainable aesthetics. Permanent protection against leakage in the marginal region is a prerequisite. The clinical long-term objective of sealed restoration margins can be achieved with greater certainty when using a reliable adhesive such as ONE COAT 7 UNIVERSAL, which was used here.

Submicron hybrid composites offer an impressive rapid and consistent gloss. Appropriate shades and an easy to achieve gloss due to intelligent filler design provide the desired and sustainable aesthetics. Permanent protection against leakage in the marginal region is a prerequisite. The clinical long-term objective of sealed restoration margins can be achieved with greater certainty when using a reliable adhesive such as ONE COAT 7 UNIVERSAL, which was used here.