

Digital Technology - New Materials, New Possibilities, Unlimited Indications?

Irena Sailer

Digital impressions and computer-aided manufacturing of restorations steadily gain in importance within restorative dentistry. Irrespective of the fact that digital impressions have been introduced to dentistry more than 30 years ago with the development of the Cerec CAD/CAM system, their application in daily clinical practice was not very frequent - until recently. Today, a high number of intraoral scanners and associated CAD/CAM procedures are available. One of the factors raising the attractiveness of computerized procedures is the high variety of new restorative materials which were introduced for the computerized manufacturing. High strength ceramics, lithium-disilicate glass-ceramics or non-precious alloys are already well established as restorative materials. New hybrid materials like e.g. nano-ceramics even promise to be long-lasting, highly esthetic and less costly. They can be used in the monolithic stage, and processed chairside in the dental practice. An increase in the application of these monolithic tooth - and/or implant - born restorations can be observed in daily clinical practice. Still, the literature on their outcomes is very scarce.

The lecture will critically evaluate the possibilities that the new technologies offer to the practitioner, and will highlight whether or not they are unlimited.