CEREC Zeitung

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EDITORIAL

Business as usual?

Will 2007 be "business as usual" as far as dentists are concerned? Dentistry is in a transitional phase, although many changes may seem imperceptible from an individual dentist's viewpoint. All-ceramic materials and computer-aided procedures are finding their way into more and more dental practices and laboratories. Preventive care and minimally invasive treatment methods are on the advance. Implants have become commonplace. In a sense, the future of dentistry is taking shape now. On the other hand, dental care has been the first to suffer from the financial constraints on public healthcare. And well-informed patients are often one-

Dentistry is at the crossroads

COMPUTER AIDED DENTISTRY. Change is never a continuous process. Instead it consists of milestones and turning points. Dentistry has reached one such turning point. The question is not whether to use modern therapy methods, but how.

2007 will be a year of turning points. For a long time computer aided dentistry was regarded as an exotic science. It took a long time before traditional companies adopted an open approach and began developing high-quality CAD products. Today all the leading players have CAD/CAM ceramics and high-tech bonding products in their portfolios and are investing large

CAD/CAM shows the way to the dentistry of the future

The CEREC product strategy

MODULAR SYSTEM. The modular upgrading of the CEREC components fulfils the demands of modern dentistry – and keeps the users up to date.

At the beginning of CEREC's development it was not difficult to determine what dentists wanted. The difficulty was to put the dentists' wishes and specifications into practice. By making some astute compromises Professor Mormann succeeded in perfecting the CEREC procedure to the extent that it could be deployed in dental practices. CEREC 1 demanded a high level of manual skill, as well as adhesive bonding techniques that allowed less precise restora-

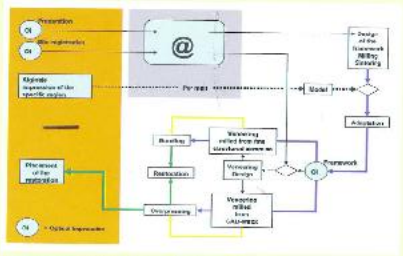
penetration of the bridge cle- faces of the temporary bridge. at the moment.

modules two trays simultaneously.

Web portal fosters closer collaboration between CEREC users and inLab laboratories

PROBLEM SOLVING. Since Professor François Duret first floated the idea of an "impression-free" dental practice several years ago, discussions have been under way about how to digitize tooth impressions and transmit the data to dental labs. CEREC provides a solution to this problem. A dedicated web portal is now under development to facilitate convenient data transfer.

CEREC users who specialize in inlays and onlays and outsource crowns to an external laboratory already have the option of transmitting optical impressions and bite registrations by electronic means. The laboratory then performs the design steps and mills the crown out of a solid feldspar or glass ceramic block. Dentists who have only a CEREC imaging unit at their disposal can adopt the same procedure for inlays and onlays. An alternative procedure could be as follows: the laboratory receives an order for a crown and begins by designing and sintering a zirconium oxide framework. Subsequently the laboratory receives an optical impression of the prepared tooth and takes a further optical impression of the framework. This provides the basis for creating an anatomical crown that makes allowance for the bite registrations. This crown is then milled out of a feldspar ceramic block or from a completely combustible plastic material. After characterization has been performed the feldspar ceramic crown is bonded to the finished framework. Alternatively, the plastic crown can be used to overpress the framework.



The „impression free" dental practise becomes reality.

Many technical options are now open – thanks to the compatibility of CEREC and inLab. However, transferring large quantities of data still poses a problem – especially where bridge restorations are concerned. Data files in excess of 50 MB often exceed the limits of the dentists' and dental technicians' e-mail accounts. To solve this problem Sirona is in the process of creating a web portal that will allow dentists to upload their optical impressions and design data. For their part the dental technicians will be able to view this data and offer their services. The dentist chooses the most suitable laboratory and awards the order. All the laboratory has to do is download the data from the web portal and start working.

The web portal is currently under construction and will undergo extensive security and usability tests beginning in April. ■

Why choose Sirona's CEREC Blocs?

MATERIAL. New logical shade selection system unites simplicity with diversity.

CEREC has proved itself in dental practices and laboratories – as evidenced in an estimated 12 million ceramic restorations that have already been placed worldwide. At the end of 2006 Sirona introduced its own range of ceramic materials to augment the product offerings of VITA Zahnfabrik and Ivoclar Vivadent.

The silicate ceramic CEREC Blocs have been designed specifically for the fabrication of inlays, onlays, partial crowns, veneers and fully anatomical all-ceramic crowns. A new feature is the colour selection system, which makes special allowance for the translucency and enamel-like properties of the tried-and-tested silicate ceramic material. This so-called "Shade Cross" combines the simplicity of the VITA Classical Shade Guide and the logic and diversity of VITA 3D Master. It comprises six degrees of lightness, ranging from bleached (S0) to dark (S5). In addition, there are blocks with a higher Translucency (S2-T to S4-T) and a higher Opacity (S2-O to S4-O). In keeping with this logic the Medium opacity blocks are designated S0-M to S5-M. The CEREC Shade Cross encompasses the 3D Master shades and the widely used classic "A" shades. As a result CEREC users can continue to deploy their existing shade guides. In addition, polychromatic (PC) CEREC Blocs are available in three different degrees of lightness. They are the ideal choice for full crowns and partial crowns.

Manfred Kern/Jens Voßbrecht

The CEREC shade selection system combines the simplicity of VITA Classical and the diversity of 3D Master. The blocks should be selected firstly on the basis of lightness, and secondly on the basis of colour saturation.