

Dental digital revolution

In the past two decades, dentistry has indeed witnessed a digital revolution. There has been an impact of this revolution on both clinical practice and dental laboratory. In order to be globally competitive, we have to embrace the technological advances and web-based applications. Technophobia will affect our progress. Practice management software and intraoral cameras have been popular in the dental office. It is the practicebased CAD/CAM that holds promise for the future. They claim to have the advantages of delivering restorations in the office within 2 hours – no impressions or temporization, no laboratory bills, time saving and high precision. This sounds theoretical and too good to be real. This is indeed true today. However the question of economics will always haunt us.

A significant part of the cosmetic dentistry market is driven by computer-aided designing and computeraided machining technology. The materials used for restorations are stronger, have better esthetic value, are durable and also promise optimal fit of the restorations. Dental offices of the future would be investing in such digital scanners. Though quadrant scanners are popularly used today, full-arch scanners would definitely come in. Electronic or e-communication of dental data would gain prime importance in the preparation of restorations. The data of digital shade matching of the tooth before preparation and intraoral digitally scanned impression would be communicated through the internet to the rapid prototyping centers. The CAD/CAM technology also would replace the conventional 'lost wax' technique in the preparation of metal copings. The CAD/CAM technology and rapid prototyping are already playing a significant role in implantology and maxillofacial prosthodontics. Computer-assisted implant planning is indeed booming. These implant planning software aid in faster rehabilitation and in placing the implants in ideal positions. With all these futuristic technologies coming up, practice of restorative dentistry would be facing huge changes in the future.

So we have to gear up to face these challenges; we cannot shy away from this situation. We have to be a part of the dental digital revolution.

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