Guest Editorial

DIGITAL DENTISTRY - Where are we today??

Digital dentistry has become an integral part of mainstream dental practice. And it is here to stay. The diagnostic procedures, patient education, treatment modalities, laboratory technologies, record maintenance etc have seen revolutionary changes in the recent past.

Digital imaging techniques have made diagnosis quicker and efficient. On similar lines patient education materials in digital format have enhanced the dental practices.

Implant planning soft wares have tremendously impacted the way we plan and execute our treatment. Printed surgical guides have added more precision and made the implant treatments more predictable and successful

For a prosthodontist, intraoral optical scanners (IOS) have been a game changer. With various scanners flooding the market, the prosthodontist has many options to choose from. Most importantly we need to assess the trueness and precision of the scanners while we choose from a myriad of available scanners.

Though we don't use the conventional impression materials on a regular basis in routine clinical practice, but we need to understand that IOS devices have certain shortcomings as well. For e.g., studies has shown that there are discrepancies while using IOS for full arch implant impressions and there have been comparative studies to assess the efficacy of the high end scanners while using them for full mouth rehabilitation. Therefore, it's the discretion and the sole responsibility of the clinician to understand the application of these digital devices

The scan bodies and digital implant analogues have also witnessed major trends. They need not be powder coated anymore with the advent of PEEK scan bodies. The way technology is evolving so rapidly, that it is making the current trends redundant in a matter of few months!! CAD CAM and 3D Printing is one such technology where there have been rapid advances which helps the dentist deliver better patient outcomes. Patient education and planning softwares such as Digital smile design has vastly improved patient understanding and in turn have improved the clinical practices

AR (Augmented reality) and VR (Virtual reality) can be employed at institutional levels to impart better teaching and learning outcomes. While digital dentistry is an integral part of modern dentistry, there is definitely a learning curve and the other challenges are the huge costs and the training for the dentists who would want to adopt digital dentistry. Digital dentistry is here to stay and there are pitfalls and challenges but it is imperative that the clinician is aware and makes a wise decision to provide a better standard of care to the patients

Regards

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