

Applications of Digital Technology in Contemporary Orthodontics

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In the digital era today, technology continuously changes the way we think and act. This digital world has improved every industry and profession rapidly and widely. What is "Digital Orthodontics"? It is not just clear aligner treatment, nor alternatives to plaster models. Digital Orthodontics is here to stay. The digital imaging, intraoral scanning, CAD dental software, and 3D printing are transforming our traditional workflows. More and more applications are introduced with enhanced speed, precision, efficiency, and lower cost. With this new way to practice, every orthodontist can choose the proper solution to meet their requirements. The contemporary orthodontics is full of imagination and creativity.

For prosthodontists, we don't need to guess what's the real inclination of the abutment tooth under a prosthetic crown. And the provisional crown could be manufactured with the CAD/CAM technique in advance to save the labor work. For the implantologist, we

don't need to postpone the implant procedure after the completion of orthodontic treatment. The dental implant can be inserted as early as possible to provide sufficient posterior support in those mutilated dentitions. For surgeons, we can foresee the treatment result through the simulation software. All the preparation procedures could be done in a new digital workflow effectively and efficiently.

Someone may be worried and terrified that the A. I. will replace our jobs. But there are three human qualities that digital technology can't replace in the future: experience, value, and judgment. Those new technologies are just tools to enhance our treatment quality and patients' welfare. The key to success is still reliant on the person who makes the diagnosis and treatment plan -- That is us, the orthodontists!