

Laser in Implant Dentistry

Dental implant restoration has become an indispensable, well-accepted and reliable therapy in dentistry for decades. Laser is the next new technology with gradually attention, promotion and development recently. Extensive research had been carried out on the applications of laser in dental implantology, which shows a prospect result. Because of the characteristics of laser cutting soft tissue with less pain, less bleeding and postoperative reaction, laser has a long history of applying to the second stage operation, exposing submerged implants, peri-implant soft tissue plasty and remodeling, incision and flap operation. With Er:YAG/Er,Cr:YSGG laser, we can also operate on hard tissue, alveolotomy, implant bed preparation, block bone augmentation, bone window preparation for sinus lift, alveolar crest split, etc. At present, laser has been widely used and has the unique advantage in the treatment of peri-implantitis, including multi wavelength laser and photodynamic therapy. In addition, there is evidence suggest that certain types of laser have a role in promoting osseointegration, promoting tissue healing and reducing postoperative reaction, which make oral laser could be involved in the whole procedure of implant restoration. We should understand the characteristics and operation specifications of different wavelength laser, in order to make full use of the advantages of laser to improve clinical outcome, with minimal damage on the tissue around and the implant. This presentation will be an introduction of oral laser applications in dental implantology, how to integrate laser in daily clinical work and benefit the patients and doctors.