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 Executive Council (Member-At-Large, 2016-2018), Asian Association of Oral & Maxillofacial Surgeons
 Orthognathic Surgery Course, National Seoul University, Korea, 2001
 M.S., Institute of Medical Science, China Medical University, Taiwan, 2000-2002
 Autogenous Bone Grafting Course, University of Miami, USA, 1998
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Presentation Date: Thursday 10 May 2018 11:00 AM - 12:00 PM & 4:00 PM - 5:00 PM

Venue SMX CONVENTION CENTER MANILA Function Room 5

Presentation Title: CAD/CAM FACIAL SKELETAL SURGERY - EFFICIENCY, PRECISION AND SAFETY

Computer Assisted Surgery (CAS) can be categorized into 3 subgroups, robotic surgery, navigation systems and CAD/CAM technology. However, robotics seemed to be more practical and limited to soft tissue dissection while navigation procedures are generally considered time consuming during preoperative setting. The outcomes of utilizing computer-aid virtual planning(CAD) and additive manufactured cutting / positioning guides(CAM) as well as powerful ultrasonic apparatus (BoneScalpel TM by Misonix Inc, Farmingdale, NY, USA & BONEMED Surgery Unit TM, VIATECH Biomedical. Co. Ltd, Taiwan) with tissue selective cutting characteristics in a series of more than 100 patients underwent 2-jaw orthognathic surgery in the OMS department of China Medical University Hospital, Taichung City, Taiwan from Jul. 2014 ~ Jul. 2017 will be presented. Both efficiency and preciseness have been significantly improved by applying CAD/CAM technology in our case series especially for those suffered from obvious asymmetric situations where complicated pitch, roll & yaw are inevitable, in which traditional 2D analysis is certainly insufficient and not reliable. The same CAD/CAM concepts are also applicable to cosmetic facial bone contouring and selected cases of benign jaw bone tumor resection with immediate reconstruction through trans oral approach.