

March 26-27, 2018  
Edinburgh, Scotland

Isil Damla Sener-Yamaner et al., J Den Craniofac Res 2018, Volume: 3  
DOI: 10.21767/2576-392X-C1-002

## STATIC OR DYNAMIC COMPUTER GUIDED SURGERY: WHEN AND HOW?

*Isil Damla Sener-Yamaner<sup>1</sup>, Atilla Sertgöz<sup>2</sup> and Esra Yüce<sup>3</sup>*

<sup>1</sup>Istanbul Aydın University, Turkey

<sup>2</sup>Marmara University, Turkey

<sup>3</sup>Biruni University, Turkey

**P**lacement of the implant with the help of computers can be done with two different ways: static or dynamic computer guided surgery. In static way, using surgical software and computerized tomography (CT) or volumetric dental tomography (VDT) scan data can be transferred into a 3- dimensional implant planning program to allow for accurate planning and placement of implants. Computer software has been designed to enhance clinical implant treatment planning through reading and interpreting CT scans, performing measurements and evaluating anatomic relationships by placing virtual implant images on the screen (CAD-Computer Aided Design). Computer generated surgical templates and anatomic models can be fabricated allowing for the transfer of CAD treatment planning decisions to the surgical treatment phase (CAM-Computer Aided Manufacturing). Computer-aided design and manufacturing have made possible to use data from computerized tomography to not only plan implant rehabilitation, but also to transfer this information to the surgery. One of these techniques uses stereolithography (SLA), which is the most well-known, a laser-driven polymerization process that fabricates an anatomic model or surgical templates. A relatively recent emerging field in dental implantology is dynamic computer-assisted dental implant surgery. For the accurate transfer, registration of the patient's prosthetic outcome is necessary with trackers or superficial markers, after which a navigation system allows the surgeon to guide the instrument freely, as in conventional treatment. Several commercial optical navigation systems are available in dental market. This clinical presentation will compare the static and dynamic computer-assisted dental implant surgeries in clinical cases.

### *Biography*

Isil Damla Sener-Yamaner has completed her PhD from Department of Prosthodontics, Faculty of Dentistry, Marmara University and Postdoctoral studies from Department of Prosthodontics, Faculty of Dentistry, Istanbul Aydın University. She is now Assistant Professor and has published about 25 papers in reputed journals.

isildamlasener@gmail.com