

A Comprehensive Guide to Computer-Aided Surgery Systems in Dental Implantology

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ABOUT THE STUDY

Computer-aided surgery systems have revolutionized the field of dental implantology, providing clinicians with a greater level of accuracy and precision when placing dental implants. With the help of computer-aided surgery systems, clinicians can plan and execute implant placement with greater predictability, leading to improved patient outcomes. In this essay, we will discuss three different computer-aided surgery systems used in dental implantology

- Nobel clinician
- Simplant
- Blue sky plan

Nobel clinician

Nobel clinician is a computer-aided surgery system that offers a comprehensive solution for treatment planning and guided surgery. The system utilizes Cone Beam Computed Tomography (CBCT) scans to create a 3D virtual model of the patient's oral anatomy. The virtual model is then used to plan the placement of dental implants, taking into account the anatomical limitations of the patient's jawbone. Nobel Clinician offers a range of tools and features that allow clinicians to customize their treatment plans to suit the specific needs of each patient. These include the ability to choose from a variety of implant types and sizes, as well as the ability to adjust the position and angulation of the implant.

Once the treatment plan has been finalized, Nobel Clinician generates a surgical guide that is used during the implant placement procedure. The surgical guide is designed to fit snugly over the patient's teeth and guide the drill during the implant placement procedure. The use of a surgical guide ensures that the implant is placed in the precise location and orientation that was planned during the virtual planning phase, leading to improved accuracy and reduced surgical time.

Simplant

Simplant is another computer-aided surgery system used in dental implantology. Like NobelClinician, Simplant utilizes CBCT scans to create a 3D virtual model of the patient's oral anatomy. Simplant's virtual planning software allows clinicians to plan the placement of dental implants with a high degree of accuracy and precision. The software includes tools for selecting the appropriate implant type and size, as well as the ability to adjust the position and angulation of the implant.

Simplant also offers a range of features that are designed to improve the accuracy of the implant placement procedure. These include the ability to take into account the thickness of the patient's soft tissue, as well as the ability to simulate the placement of the implant in real-time. Simplant's virtual planning software can also be used to create a surgical guide that is customized to the patient's unique anatomy.

Blue sky plan

Blue sky plan is a third computer-aided surgery system used in dental implantology. Like NobelClinician and Simplant, Blue Sky Plan utilizes CBCT scans to create a 3D virtual model of the patient's oral anatomy. Blue Sky Plan's virtual planning software includes a range of tools and features that allow clinicians to plan the placement of dental implants with a high degree of accuracy and precision.

Computer-aided surgery systems have revolutionized the field of dental implantology, providing clinicians with a greater level of accuracy and precision when placing dental implants. Nobel Clinician, Simplant, and Blue Sky Plan are three different computer-aided surgery systems that are widely used in dental implantology. Each system offers unique features and benefits, but all are designed to improve the accuracy and predictability of the implant placement procedure. Clinicians should carefully consider their specific needs and the features of each system when choosing.

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Received: 01-Mar-2023, Manuscript No. DCR-23-20898; **Editor assigned:** 06-Mar-2023, Pre QC No. DCR-23-20898 (PQ); **Reviewed:** 20-Mar-2023, QC No. DCR-23-20898; **Revised:** 27-Mar-2023, Manuscript No. DCR-23-20898 (R); **Published:** 04-Apr-2023, DOI: 10.35248/2161-1122.23.13.631

Citation: Dorafshar A (2023) A Comprehensive Guide to Computer-Aided Surgery Systems in Dental Implantology. J Dentistry. 13:631.

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