

The Combination of Digital Surface Scanners and Cone Beam Computed Tomography Technology for Guided Implant Surgery Using 3Shape Implant Studio Software: A Case History Report

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Resumen

The incorporation of virtual engineering into dentistry and the digitization of information are providing new perspectives and innovative alternatives for dental treatment modalities. The use of digital surface scanners with surgical planning software allows for the combination of the radiographic, prosthetic, surgical, and laboratory fields under a common virtual scenario, permitting complete digital treatment planning. In this article, the authors present a clinical case in which a guided implant surgery was performed based on a complete digital surgical plan combining the information from a cone beam computed tomography scan and the virtual simulation obtained from the 3Shape TRIOS intraoral surface scanner. The information was imported to and combined in the 3Shape Implant Studio software for guided implant surgery planning. A surgical guide was obtained by a 3D printer, and the surgical procedure was done using the Biohorizons Guided Surgery Kit and its protocol.

Palabras clave

KeyWords Plus: Flapless Surgery; Planning System; Follow-up; Accuracy; Placement; Prosthesis; Templates; Dentistry; Survival; Outcomes