

CS 9300 System/ CS 3500 Intraoral Scanner

## Intraoral Impression Scanning Combines Digital and Implant Dentistry for Streamlined Results

Bart W. Silverman, D.M.D., Oral and Maxillofacial Surgery

### Case Overview

A 55-year-old male presented to my office with a right maxillary alveolar abscess and bone loss associated with his maxillary right second premolar. The patient had visited his dentist approximately one month prior, as his crown had fallen out. The dentist replaced the crown and the infection became apparent soon after. After consulting with the general dentist regarding tooth removal, a bone graft and implant placement with future internal lift were planned.

### Treatment Plan:

The fractured maxillary right second premolar was surgically removed, and a mineralized cortical bone graft as well as a cytoplast membrane was placed. Following healing, a CS 9300 CBCT scan was performed to take a cursory panorex. A Thommen 4.5mm/3.2mm x 9.5mm contact implant was placed, along with an internal sinus lift.

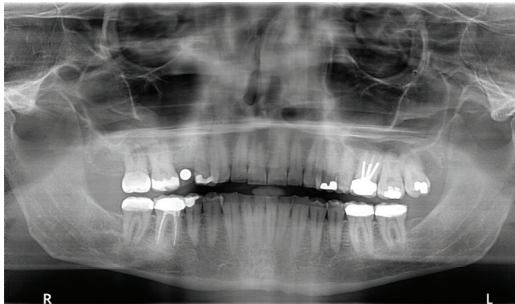


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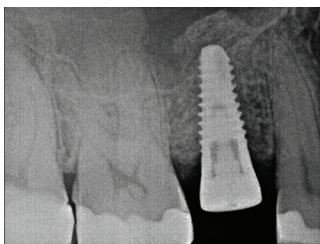
Dr. Silverman is in private practice limited to Oral and Maxillofacial Surgery in New City, NY and is an attending Physician at Westchester County Medical Center, Department of Oral and Maxillofacial Surgery and Nyack Hospital, Department of Dentistry. He is also a Clinical Associate Professor at New York Medical College. He lectures nationally on several different implant systems and is President of the Bi-State and Hudson River Implant Study Clubs. He is a past president of the Rockland County Dental Society and previously served on the Board of Governors of the Ninth District Dental Society.

Dr. Silverman graduated from Fairleigh Dickinson University in 1982 Summa Cum Laude and received his doctorate in Dental Medicine in 1986 from Fairleigh Dickinson Jr. School of Dentistry, where he was a member of the Omicron Kappa Upsilon Honor Society. He completed his Oral and Maxillofacial Surgical residency at Westchester County Medical Center in 1989 and was Chief Resident during his final year. Dr. Silverman is currently a Diplomate of the American Board of Oral and Maxillofacial Surgery.

Clinical Case Study



Pre-op CS 9300 panorex after extraction of tooth #4 and bone graft



Implant in place after internal sinus lift



The implant with gingival former in place following healing



# Clinical Case Study

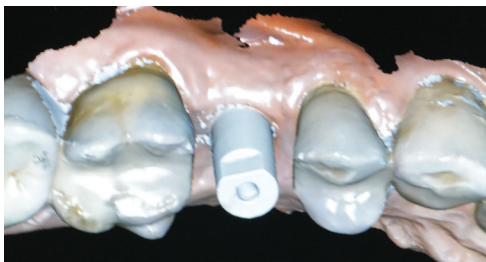
After healing, the patient presented to my office for a digital impression. A preliminary scan of the gingival former using the CS 3500 intraoral scanner was performed. The gingival former was removed, a scanning body was placed into the implant and the CS 3500 was used to scan the scanning body as well as the rest of the maxillary arch and the opposing arch. The digital file was sent to Core 3-D lab and a custom titanium abutment was fabricated. The abutment was shipped to Digident Dental Lab in Orangeburg, NY and a ceramic crown was fabricated after the general dentist picked a shade. The abutment was placed, torqued to 32 cm and the crown cemented.



Scanning body in place



CS 3500 scan of scanning body and bite



CS 3500 scan of maxillary right quadrant



Printed model with custom milled titanium abutment



Crown courtesy of Dr. Martin Schwartz

## Testimonial:

This case illustrates how digital dentistry can be used with implant dentistry. Frequently, a fixture level impression is taken and subsequently a model is poured up in stone; on top of which a custom abutment is made. Later the dental technician will fabricate a ceramic crown. Using the CS 3500 intraoral digital impression, the workflow is streamlined. By placing a scanning body and scanning it with the CS 3500, the custom abutment and crown are produced via a digital model. The abutment and crown are planned virtually, reducing patient chairtime and overall case turnaround time.

Would you like to know more? Visit us on the web at [www.carestreamdental.com](http://www.carestreamdental.com) or call **800.944.6365**.

