PREDICTABILITY WITH IMPLANTS USING

PLANNED GUIDED IMPLANT SURGICAL TECHNIQUES.

The replacement or a single tooth, multiple teeth or removing all natural dentition and placing dental implants is a surgical and restorative challenge. Diagnosis and treatment planning can be combined with the use of a CBCT (Cone Beam Computer Tomography) and 3-D software to achieve predictable results. SmartFusion is the merging of 2 databases, the CT Scan and the information scanned from the master cast. The Nobel Procera 2G optical scanner automatically merges these date sets.

Dr. Michael Dove is in Solo General Practice in Barrie, Ontario. He has a special interest in providing treatment for dental patients using sedation. He also has a special interest in comprehensive dentistry including the use of implants. Dr. Dove has been in practice for more than 25 years and is a graduate of the University of Toronto and General Practice Residency Program at Mount Sinai Hospital in Toronto. His practice includes progressive technology and strong interest in continuing education.

Ms. Teresa Maltese is a registered restorative dental hygienist who has a special interest in technology and comprehensive general dentistry. She is a graduate of George Brown College in Toronto where she won top academic and clinical awards.

What does SmartFusion allow me to do in my practice?

NobelClinician supports efficient treatment planning by linking with the NobelProcera 2G System, allowing the capture of digitized prosthetic information for the current and desired situations, eliminating the need for a radiographic guide. - NobelClinician Viewer or Communicator facilitates collaboration with all treatment partners and the iPad ® app allows the clinician to present patient - specific treatment options in a way that is visual and easy to understand for increased patient acceptance. NobelConnect is Nobel Biocare's secure online storage space where you can share information seamlessly between NobelClinician, the NobelProcera 2G System, NobelClinician Communicator and OsseoCare Pro.

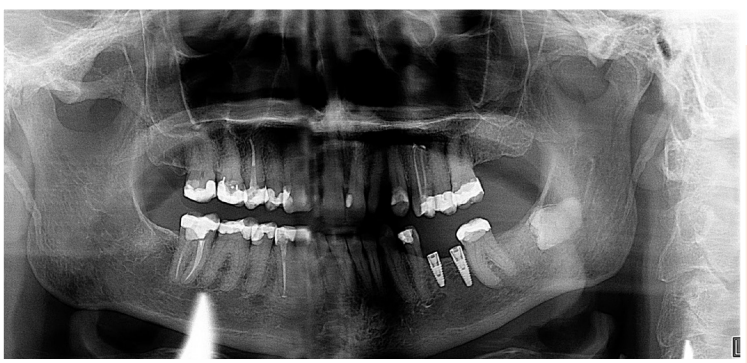
During the first visit, the (CB)CT scan and the dental impression are done by the qualified dental assistant, preferably by the clinician. The dicom files can immediately be uploaded into the NobelClinician Software along with the 3D model being created in the NobelClinician Software by the dental assistant. They can also upload additional supporting files like clinical pictures and X-rays into the software. After everything has been prepared, the clinician can immediately start diagnosing, check if implant treatment is a possible solution and decide whether bone grafting or other surgical procedures are required.

After the first appointment and the treatment acceptance received by the patient, the clinician starts detailed planning by sending the impression taken during the first visit to the lab for the tooth setup. The lab scans the dental cast and the diagnostic tooth setup with the NobelProcera 2G System, and the data is uploaded via NobelConnect to NobelClinician Software.

Efficient and predictable treatment outcomes - Thanks to the accuracy and flexibility of the NobelProcera 2G System, which accurately and easily captures all the critical surface information of the plaster model and of the diagnostic tooth setup, the data can easily and quickly be obtained. It is easily shared between dental lab and clinician to support efficient treatment planning which leads to predictable treatment results. - No additional (CB)CT scan with radiographic guide is needed (minimizing the radiation dose and avoiding additional costs). Combination of hard and soft tissue information thanks to NobelClinician's SmartFusion technology. This unique technique combines 3D X- ray data from the (CB)CT scanner and surface data from the NobelProcera 2G System.

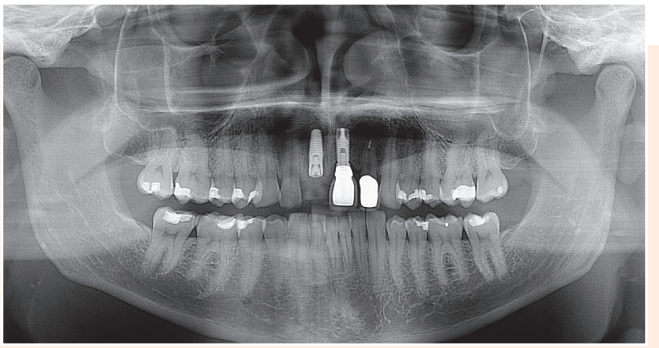
Patient #1: 65 year old female with non-restorable teeth #35 and 36. This patient was not interested in having a having a bridge and definitely not interested in having a denture and had a short but reasonably wide alveolar ridge.

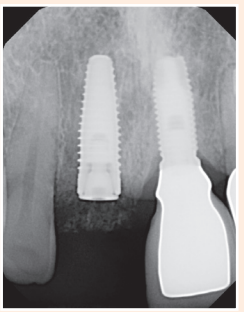
Solution: We used a fully guide SmartFusion technique to place implants using a flapless surgical technique.



Patient #2: 35 year old male with a fractured upper anterior central and a broad smile. Adjacent tooth is restored by an implant supported crown.

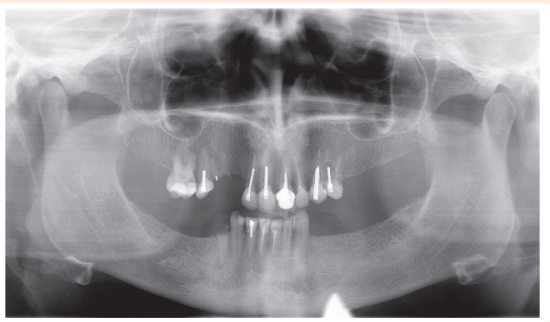
Solution: A fully guided SmartFusion case to both properly position(both in angle and for platform depth consideration) the implant to obtain maximum aesthetics for both gingival margin and the papilla formation.

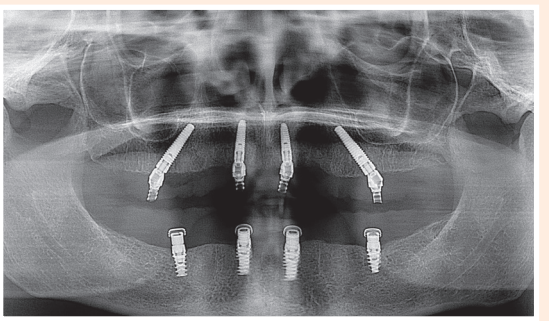


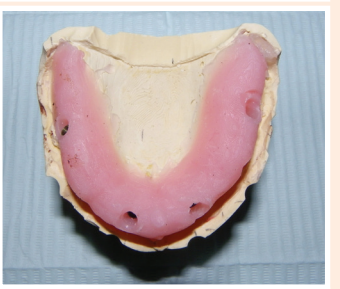


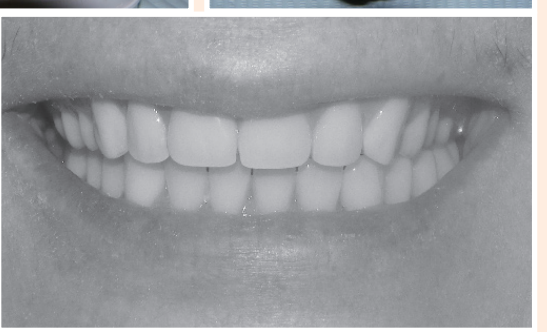
Patient #3: 45 year old female with locator retained mandibular denture. The patient was looking for a non-removable solution for the maxilla.

Solution: A fully guided technique to allow placement of the properly angled implants for an all-on-four solution with the screw retained temporary prosthetic.



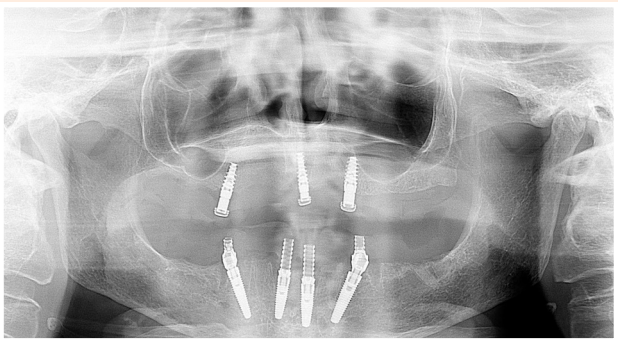
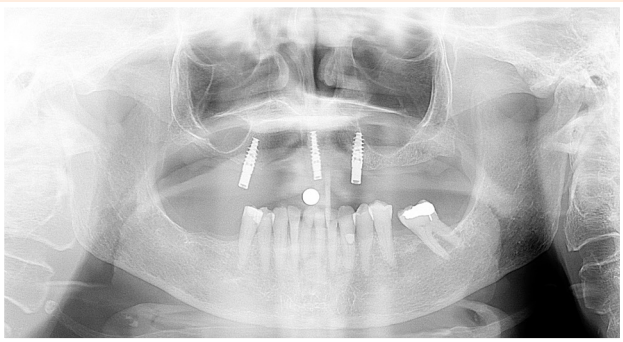


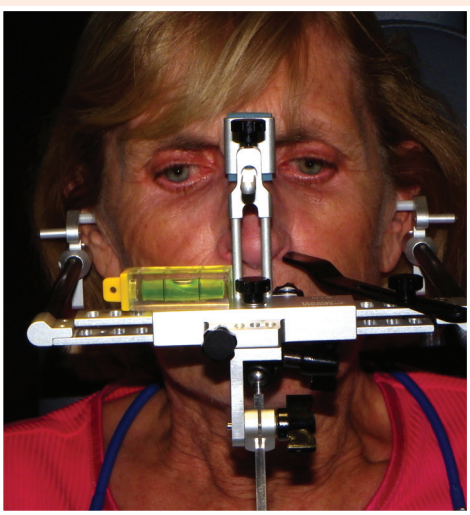
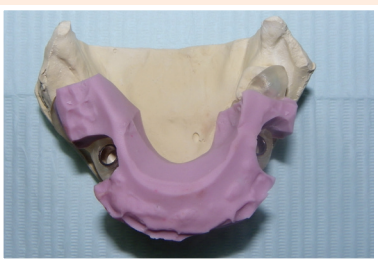




Patient #4: 75 year old female who had an upper previously restored with a locator style implant supported denture. She had nine remaining lower teeth and was looking for a non-removable immediate denture solution.

Solution: A fully guided TWO STENT SmartFusion technique. A two stent system where we removed nine madibular teeth in two stages and placed four implants and proceeded with placement of a screw retained prosthetic. The modification of the traditional SmartFusion technique allowed us to remove some of the teeth in order to get the properly positioned posterior implants in place. We then, using a different stent, removed some of the remaining teeth to get the properly positioned anterior implants in place. We then completed the extractions. Finally we were able to (using a pick up impression technique) place a screw retained immediate load highly aesthetic and functional complete lower denture in a very efficient manner with no alteration of the lower prosthesis.






ALL LAB WORK PERFORMED BY:

Shaw Group of Dental Laboratories