Lower anterior tooth replacement using NobelGuide guided pilot surgical template

Patient:
male
66

Clinical situation:
Vertical tooth drift of the four lower incisors, class II dento-skeletal malocclusion, chronic periodontitis, tooth mobility and dental caries.

Surgical solution:
NobelParallel Conical Connection 3.75 x 13 mm

Restorative solution:
NobelProcera Zirconia Implant Bridge

Surgery date:
October 30, 2013

Total treatment time:
Five months

"Guided pilot drilling is effective when the clinician wants to keep the control of the drilling at the drill site and of the final implant seating."

"It is particularly valuable when immediately placing implants in fresh extraction sockets, as it helps to achieve the primary stability needed in such challenging procedures."

Prof. Alessandro Pozzi
Surgeon and prosthodontist
Marche Polytechnic University
studioPOZZI
Rome, Italy

Case courtesy of Dr. Alessandro Pozzi, Italy
Initial clinical situation

Patient presented with vertical tooth drift of the four lower incisors, class II dento-skeletal malocclusion, chronic periodontitis, tooth mobility and dental caries. The slow super eruption of the lower incisors has been followed by the super eruption of alveolar bone, resulting in maintenance of the bone levels.
Treatment planning

The NobelClinician Software visualizes patient anatomy, soft tissue architecture and the ideal prosthetic outcome, simplifying the assessment of the failing super-erupted dentition and the contours of the final restoration.

With this prosthetically driven approach, immediate implant placement into the fresh extraction sockets is planned, with proper positioning and adequate primary stability to support immediate provisionalization.

Case courtesy of Dr. Alessandro Pozzi, Italy
Immediately after tooth extraction two implant sites were prepared using the NobelGuide pilot drill surgical template to facilitate guided drilling of the 2 mm twist drill.

Implants were placed in a flapless surgery. A socket augmentation procedure was performed to enhance proper healing of the fresh extraction sites. The implant platform was placed 1.5 mm below the most apical portion of the bone crest. Both implants were immediately loaded.
Two NobelParallel Conical Connection 3.75 x 13mm implants were planned in the 31–41 positions to overcome the issues related to the tight restorative space and the converging position of the canine roots.

Surgical template for pilot drilling and freehand surgery.
Prefabricated screw-retained provisional restoration was immediately placed.

Intra-oral radiograph at delivery of provisional restoration.
Final restoration

Clinical view and intra-oral radiograph of the final restoration, a NobelProcera Implant Bridge Zirconia. After the healing period, the soft tissue architecture mimics the scalloping of the gingival tissue around the natural dentition and its morphology mirrors the fully preserved bone morphology.