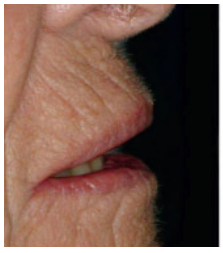
Moderate/severe bone resorption

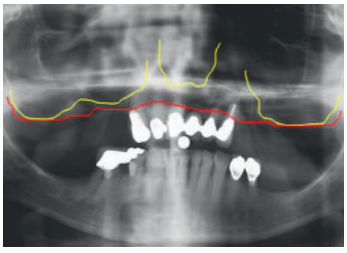
A predictable restorative outcome as a result of a pre-treatment evaluation method using NobelClinician

Patient: 73-year-old healthy female, unable to function with her existing maxillary distal extension partial dentures. **Overall health:** Unremarkable medical history with exception of Tardive Dyskinesia (involuntary facial muscle movements). **Oral examination:** Remaining anterior maxillary teeth with gross cervical caries and deemed nonrestorable. Displacement of the premaxillary alveolus and remaining maxillary teeth anteriorly due to tongue thrusting habit consistent with Tardive Dyskinesia, resulting in labial incompetence at rest. **Decision:** Dentures were not advised due to the excessive tongue thrusting. Removal of the existing maxillary teeth, alveolarplasty to raconteur the premaxilla palatally. Immediate placement of two NobelSpeedy Groovy implants in the anterior and two Brånemark System Zygoma implants in the posterior part of the maxilla, followed by a provisional restoration with Immediate Function protocol. As final restoration, a screw-retained NobelProcera Implant Bridge Titanium framework with acrylic teeth was provided. **Time for total treatment:** 6 months

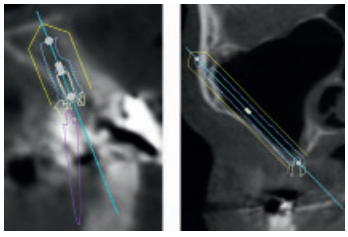


Extra-oral analysis shows the labial incompetence secondary to the displaced premaxilla. The loss of posterior support secondary to severe resorption further contributed to the involuntary movement of the tongue caused by Tardive Dyskinesia.

Intra-oral analysis shows the buccal displacement of the premaxilla and the anterior maxillary teeth leading to an increased overjet caused by tongue thrusting.

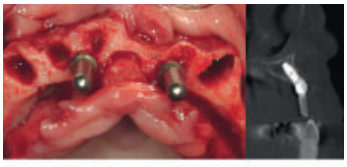


Pre-op panoramic radiograph (OPG) shows the nonrestorable teeth along with the severe bone resorption of the posterior maxilla, making it difficult to place standard implants in that region.



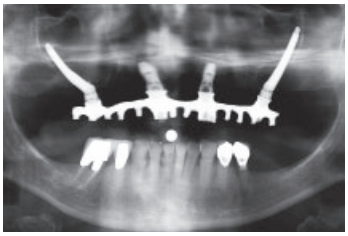
Planned virtual positioning of the immediate implants using NobelClinician Software.

NobelClinician Software was used for enhanced diagnostics and treatment planning. The immediate placement of the NobelSpeedy Groovy implants in the anterior and the Brånemark System Zygoma implants in the posterior part of the maxilla was based on the restorative needs and surgical requirements.



Alveolarplasty followed by palatal positioning of the implants as planned in the "virtual surgical planning". A post-op 3D radiograph demonstrates the final position of the premaxillary implants.

Occlusal view of the final maxillary prosthesis. The optimal emergence of the screw access of the posterior Brånemark System Zygoma implants is a result of the virtual treatment planning favoring the necessary posterior support, which would otherwise not have been possible without bone grafting.



Post-op panoramic radiograph (OPG) shows the NobelSpeedy Groovy implants in the anterior and Brånemark System Zygoma implants in the posterior part of the maxilla using the graftless approach. A NobelProcera Implant Bridge Titanium framework was used to achieve the desired support.

Post-op analysis shows the correction of the anterior maxillary teeth position and the labial incompetence with the support of the final screw-retained NobelProcera Implant Bridge Titanium framework and acrylic teeth.

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