

Guide To Immediate Implants & Teeth

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Acknowledgments

I would like to sincerely thank Doctor Lurie for providing photographs of restorative steps. We all know how difficult it is to document the case in greater detail.

I also want to thank Laguna Dental Arts Laboratory for their hard work and for the idea of creating this guide in the first place. They spent countless hours with my restorative colleagues, manufacturing state-of-the-art prosthetic cases.

Clinical Case Step-By-Step

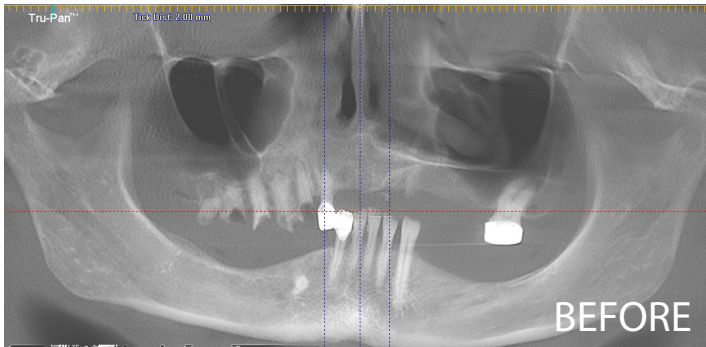


Figure 1

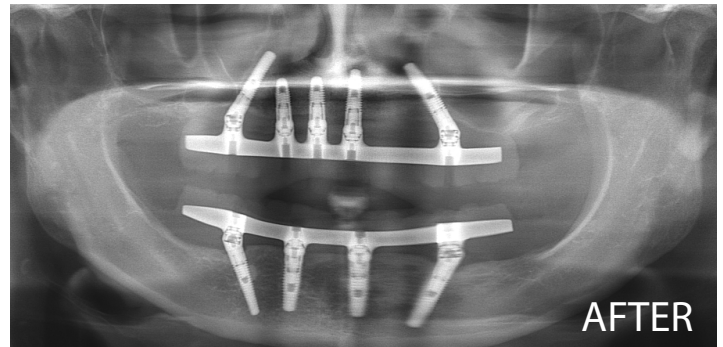


Figure 2



Figure 3 Before.



Figure 4 After.

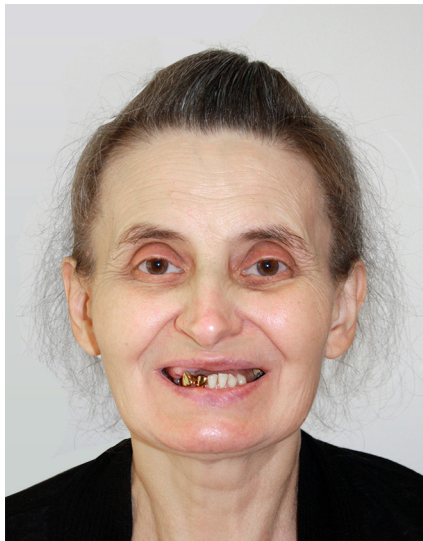


Figure 5 Before.



Figure 6 After.

Consultation With Restorative Doctor



Restorative dentist determines this patient is an excellent candidate for a total all-on-4 implant case; and initiates a referral to the implant surgeon.

Referral to the implant surgeon for CT Scan and consultation.

Surgical Steps

Step 1: Consultation With The Implant Surgeon



Consultation consists of:

- Obtaining medical/dental history
- Cone Beam CT Scan
- Facial and intraoral photography
- Implant treatment planning
- Scheduling a surgery date
- Selection of temporary prostheses with the referring doctor

Step 2: Obtaining Cone Beam CT Scan



Figure 1. Right 3D view.

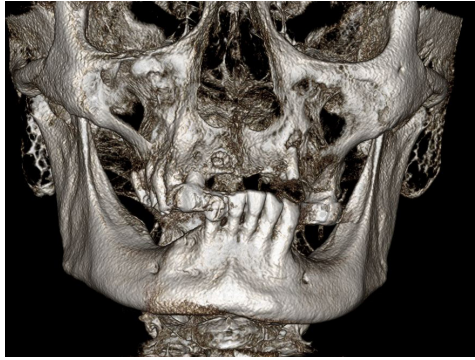


Figure 2. Frontal 3D view.



Figure 3. Left 3D view.

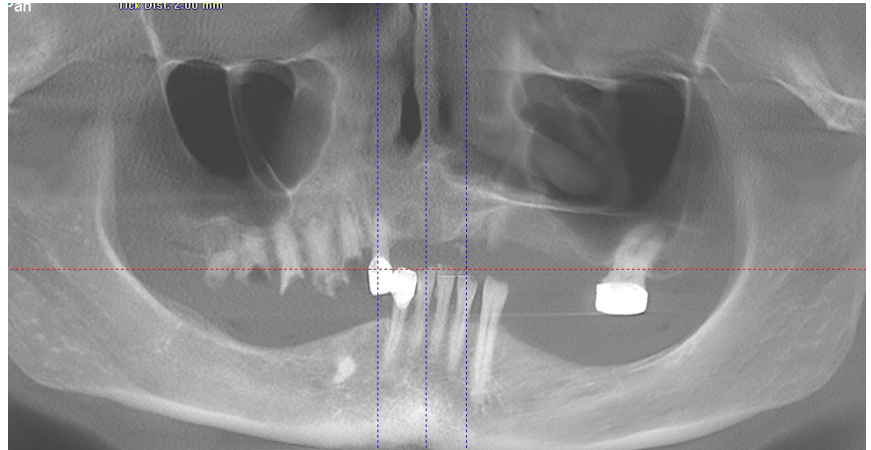
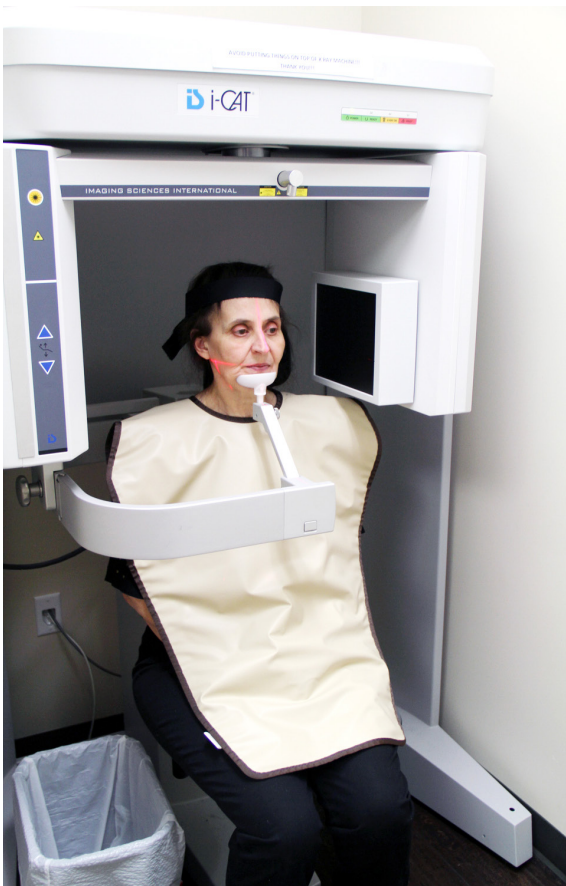


Figure 4. CT true panoramic view; all tomography cuts will be generated from here.

Step 3: Clinical Exam & Photographs



Figure 3.1 Frontal view without a smile.



Figure 3.2 Right lateral view without a smile.



Figure 3.3 Frontal view with a smile.



Figure 3.4 Right lateral view with a smile.



Figure 3.5 Close-up smile view to evaluate the transition line.



Figure 3.6 Intraoral view access of maxillary bone.



Figure 3.7 Intraoral view of the maxilla.



Figure 3.8 Intraoral view of the mandible.

Patient's case is being documented with photographs.

Step 4: Treatment Plan & Case Presentation



Case presentation and treatment plan acceptance by patient.

Surgery Date

Patient instructions:

- No food or drinks eight hours prior to surgery.
- Take all blood pressure medications the morning of surgery, with a little sip of water.
- Post surgery – patient must schedule a reliable escort to take them home.



Step 5: Extractions & Implants

Extractions with alveoloplasty and immediate implants.



Figure 5.1



Figure 5.2



Figure 5.3

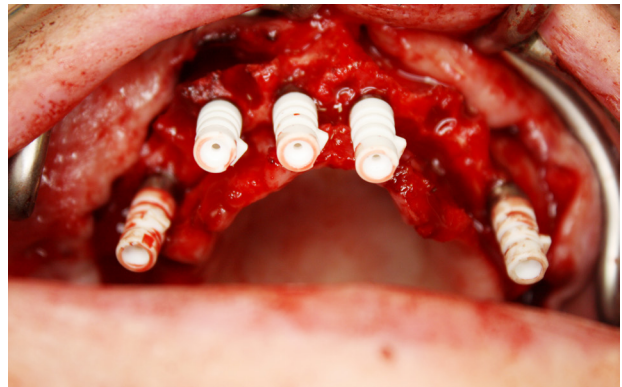


Figure 5.4 Five implants in maxilla.

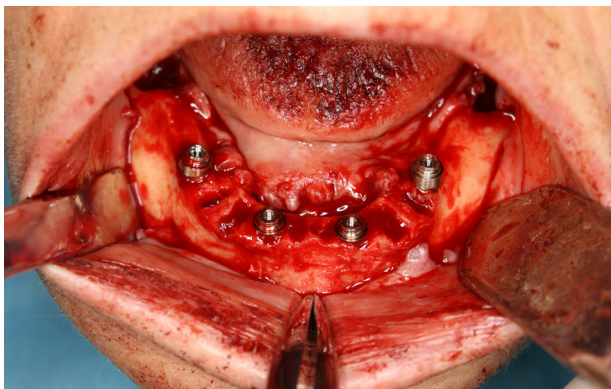
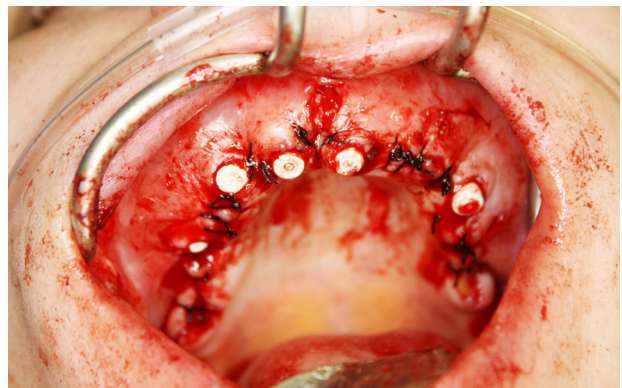


Figure 5.5 Four implants in mandible.



5.6 Suturing and comfort cap placement.

Extractions and Implants Continued



Figure 5.7
30° degree multi-unit abutment



Figure 5.8
0° 2mm multi-unit abutment



Figure 5.9 Torque wrench.

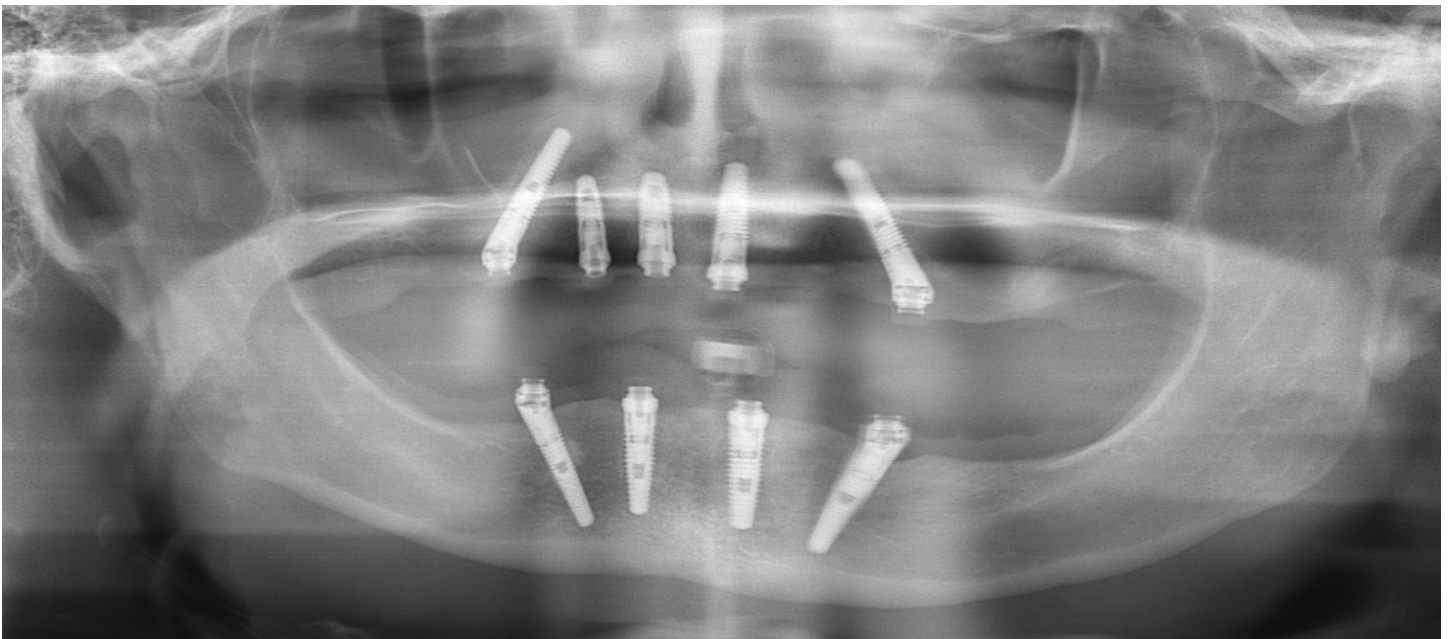


Figure 5.10
Distal implants are angled to bring restorative platform of the implant as far posterior as possible avoiding the sinuses and increasing anterior-posterior spread. 30° abutments are placed on the distal implants and 0° abutments are placed on the anterior implants. All abutments are appropriately torqued.

Step 6: Temporary Dentures Conversion Into Temporary Bridge



Figure 6.1 Frontal view.



Figure 6.2 Right view.



Figure 6.3 Left view.



Figure 6.4 Maxillary occlusal view.



Figure 6.5 Mandibular occlusal view.

Clinical photographs taken three weeks after surgery. In most cases, denture conversion into temporary fixed prosthesis is performed on the same day as surgery. This patient elected to do conversion three weeks after the initial surgery.

Temporary Dentures Conversion Continued



Figure 6.6



Figure 6.7



Figure 6.8



Figure 6.9



Figure 6.10 Blu-Mousse®.



Figure 6.11



Figure 6.12



Figure 6.13 Temporary copings attached.



Figure 6.14 Occlusal view.



Figure 6.15 Intaglio surface.



Figure 6.16 Occlusal view.



Figure 6.17 Intaglio surface.

Temporary Dentures Conversion Continued



Figure 6.18 Frontal view.



Figure 6.19 Right lateral view.

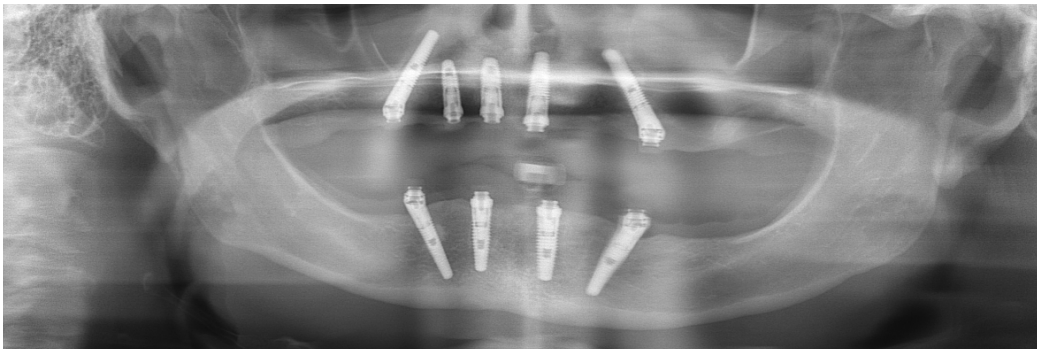


Figure 6.20 Panoramic X-Ray of immediate implants.



Figure 6.21 Left lateral view.



Figure 6.23 Right lateral view.



Figure 6.22 Frontal view.

Step 7: Final Visit With A Surgeon

Abutments torquing, final x-rays, soft tissue re-contouring if needed.

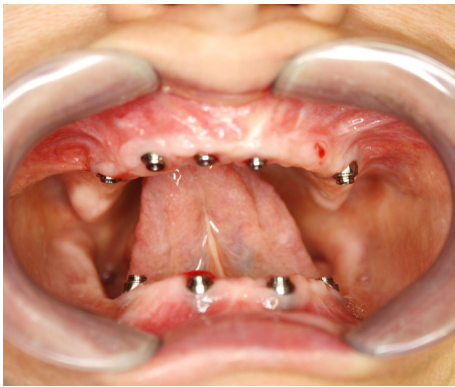


Figure 7.1 Intraoral frontal view.

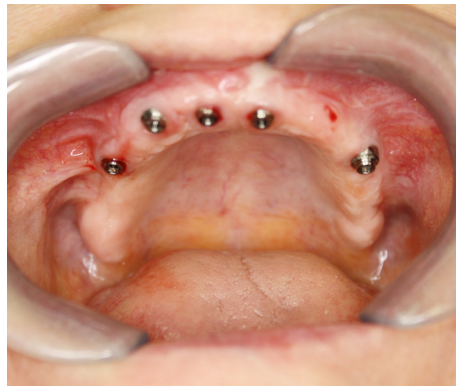


Figure 7.2 Intraoral maxillary view.

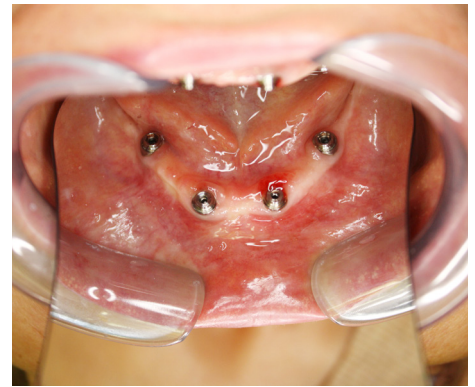


Figure 7.3 Intraoral mandible view.



Figure 7.4 Soft tissue laser.

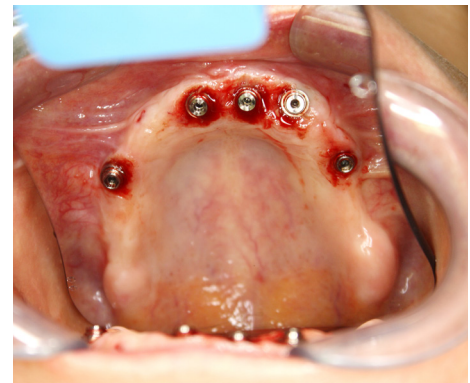
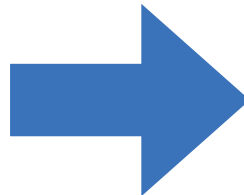


Figure 7.7 Post laser gingivoplasty.

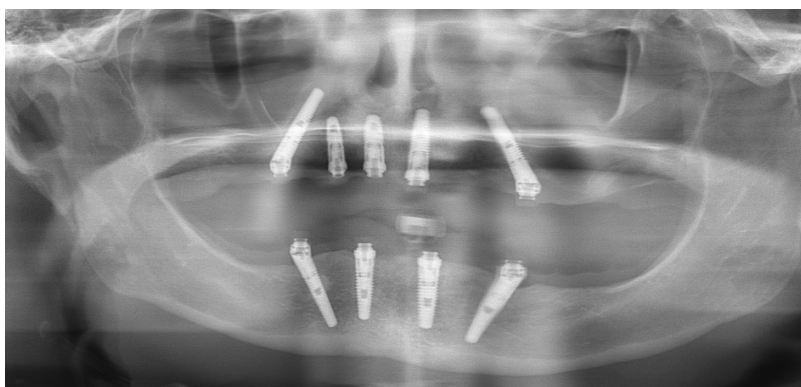


Figure 7.5 Final X-Ray.



Figure 7.6 Torque all implant abutments.

Six months post surgery: removal of temporary prosthesis and torquing all multi-unit abutments. Gingivoplasty with laser or radio wave surgery. **Surgeon refers the patient back to the restorative doctor for final prosthesis.**

Six Months Later
Patient Goes Back To The Referring Dentist

Step 1: Consultation and Selection of Prosthetic Options



Six months later patient comes back to her dentist to discuss restorative options. These includes, but are not limited to: titanium bar with high grade acrylic teeth; titanium bar with porcelain teeth; or zirconia milled bar with porcelain teeth.

Step 2: Final Impressions

Taking impressions for individual custom tray or converting stock tray.



Figure 2.1



Figure 2.2

Reinforcing the tray with orthodontic acryl.



Figure 2.3



Figure 2.4

Placing open tray non-engaging impression copings.



Figure 2.5

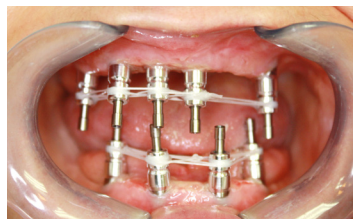
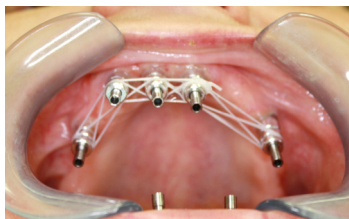


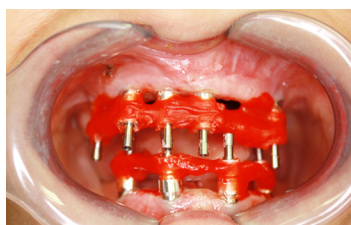
Figure 2.6 Dental floss.



2.7 Occlusal maxillary view. 2.8 Occlusal mandibular view.



2.9 DuraLay reinforcement.



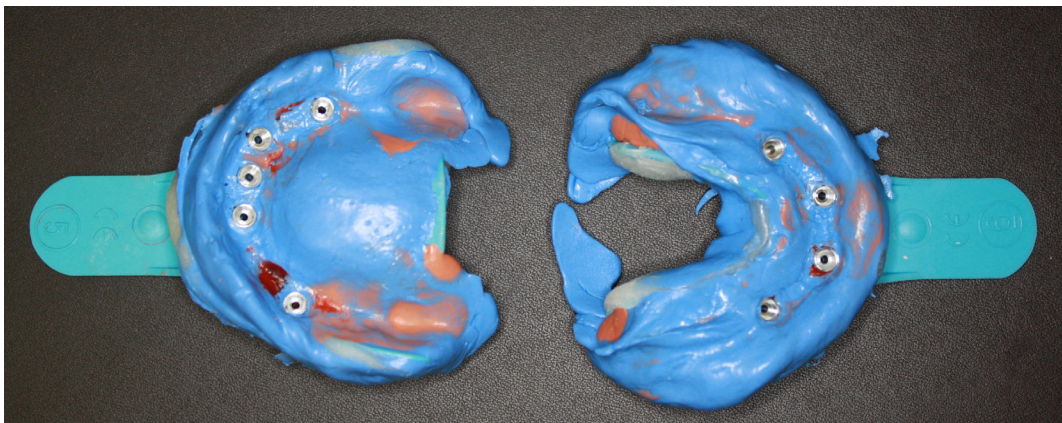
2.10 All impression copings.



Figure 2.11 Impressions.

Final Impressions Continued

Final impressions



Lab.

Figure 2.12

Step 3: Impressions Verification Gig

Placing open tray: non-engaging impression copings.

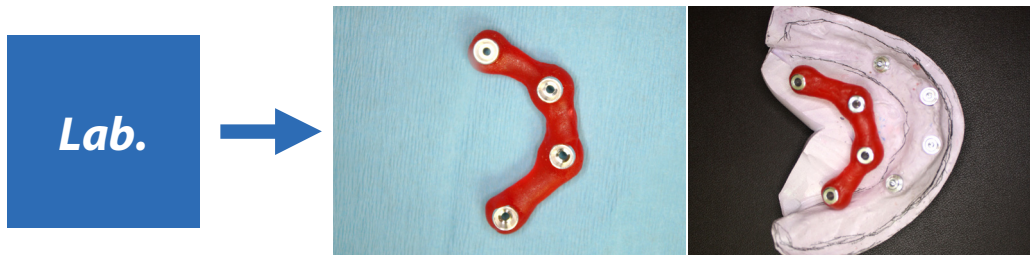


Figure 3.1 Mandible verification gig.

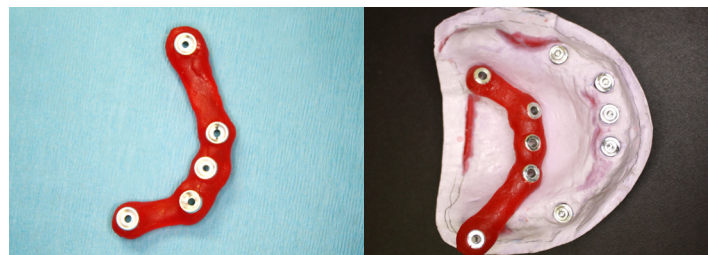


Figure 3.2 Maxillary verification gig.

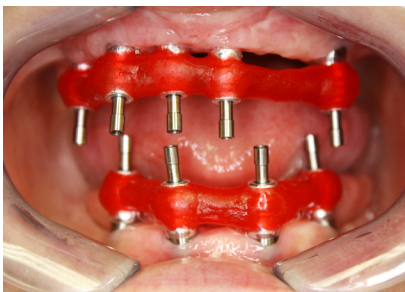


Figure 3.3

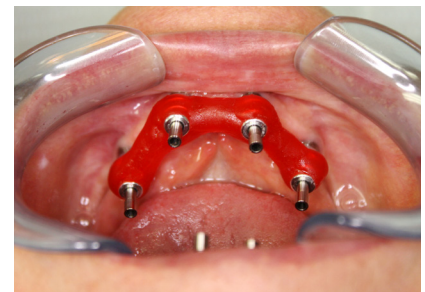
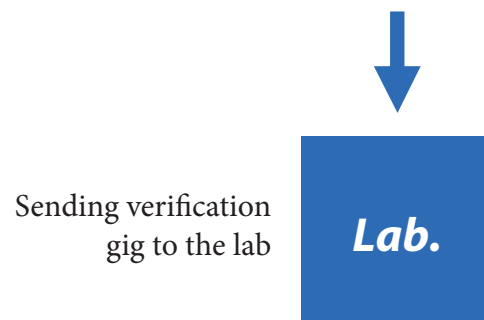


Figure 3.4 Perfect fit of verification gig verified with the X-Ray.



Step 4: Screw Retained Wax Rim Stage



Figure 4.1



Figure 4.2



Figure 4.3

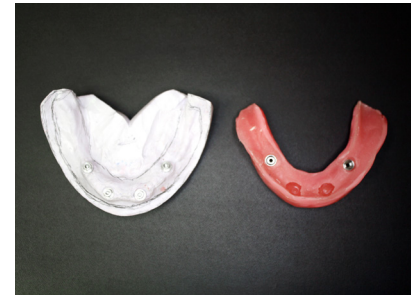


Figure 4.4



Figure 4.5 Rest position



Figure 4.6 Smile

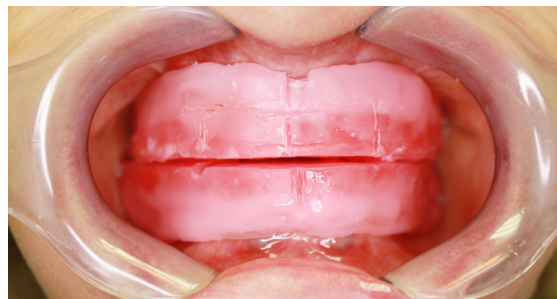


Figure 4.7

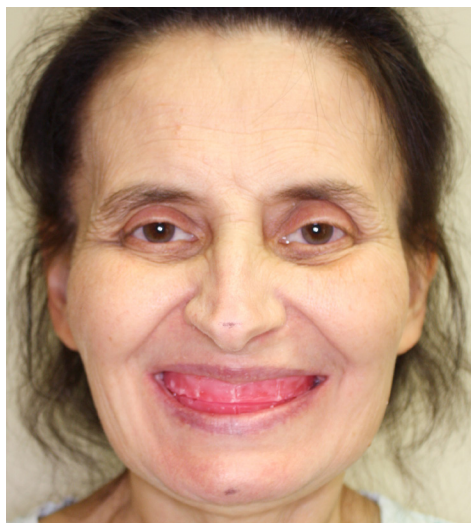


Figure 4.8 Midlines; smile line.



Figure 4.9 Anterior tooth position.

Step 5: Teeth Try-In



Figure 5.1



Figure 5.2



Figure 5.3



Figure 5.4



Figure 5.6



Figure 5.5

Teeth Try-In Continued



Figure 5.7 Lips together.



Figure 5.8 Lips relaxed.



Figure 5.9 Smile.



Figure 5.10
Checking midlines and occlusal cant.



Lab.



Lab.

Step 6: Titanium Milled Bar Construction

Titanium bar is designed based on final position of teeth.

Step 7: Milled Bar & Wax Teeth Try-In

This step was skipped in this clinical case and hybrid prostheses were processed to the final stage.

Lab.

Step 8: Final Prostheses Delivery

Dental laboratory delivered high quality hybrid prosthesis.



Figure 8.1 Occlusal view of the maxillary arch.

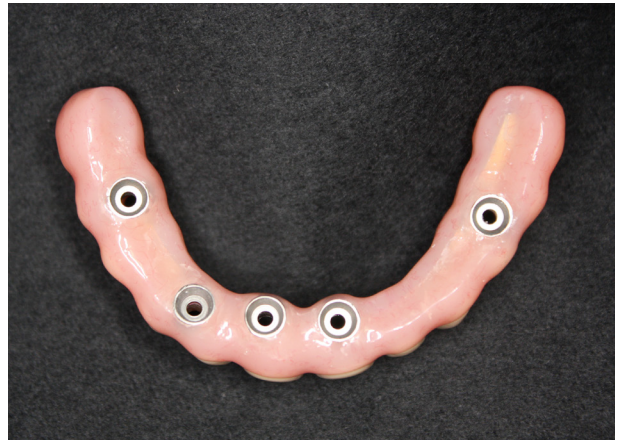


Figure 8.2 Intaglio surface of the maxillary arch.



Figure 8.2 High grade teeth.



Figure 8.5 Lingual view.



8.3 Occlusal view of the mandibular arch.

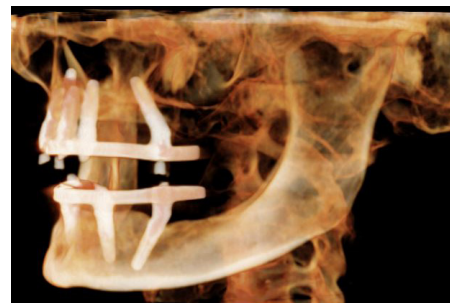


8.6 Intaglio surface of the mandibular arch.

Final Prostheses Delivery



Final Prostheses Delivery



Notes



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