Peek Implant Results with Optimal Aesthetics and Function Requires Careful Planning

CT Scan Guided Implant Dentistry

Proper Aesthetics & function requires:
1. Proper crown position and design
2. Proper implant position
3. Optimal bone dimensions
4. Optimal gingival tissue dimensions
5. Careful planning
6. Highly skillful dental team members

CT Scan is a simple office procedure
1. Reveals exact anatomy of bone
2. Shows amount of bone present for proper implant positioning
3. Determines extend of bone augmentation necessary
4. Precise & Exact information: No Guess Work

It starts with careful planning
1. Your dentist will simulate your final teeth position on models and prepare a prosthesis
2. This prosthesis is placed in mouth at the time scan is taken.
3. The scan will be used to create 3-D images
4. The scan is easy and takes a few minutes.

Precise Computer Planning
1. The 3-D images show the anatomy and available bone from all directions
2. Virtual implants are placed in the computer model and positioned to achieve the best results.

A precision fit Guide is made
1. A guide is made from computer model which allows the oral surgeon place the implant as planned on the virtual models and computer.
2. Precision implant placement and planning along with proper restorative dentistry are the keys to peek aesthetic and functional results.

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### CT Guided Implant Planning

#### Protocol and Steps

<table>
<thead>
<tr>
<th>Step</th>
<th>Responsibility</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Restorative Dentist</strong></td>
<td>Obtains accurate study models (M1) and bite registration for mounting. Send models (M1) to laboratory for a full diagnostic wax up.</td>
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<tr>
<td>2</td>
<td><strong>Laboratory</strong></td>
<td>Performs full diagnostic wax up of missing teeth, in proper position &amp; occlusion. Fabricates a CT prosthesis: This is an acrylic removable prosthesis made based on the wax up with barium sulfate marker in the crown aspect of the missing teeth. Sends the prosthesis and models back to the restorative dentist.</td>
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<tr>
<td>3</td>
<td><strong>Restorative Dentist</strong></td>
<td>Places the CT prosthesis in patient’s mouth and checks for accuracy of fit, and positioning, and aesthetics of the crowns where implants will be placed. If it is a partially edentulous case, a new set of impressions for models (M2) are taken from the patient and poured with accuracy; then sent directly to Materialize company for surgical guide. (Materialize: 810 Cromwell Park Drive, Suite X Glen Burnie, MD 21061 Phone: 1-888-327-8202) Once approved, the CT prosthesis is given to patient for icat imaging.</td>
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<td>4</td>
<td><strong>Patient</strong></td>
<td>Will make appointment with icat center recommended by surgeon for imaging. Patient will take the CT prosthesis with him/her to the icat center.</td>
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<td>5</td>
<td><strong>icat center</strong></td>
<td>Doctor at icat center will place the CT prosthesis in patient’s mouth and verifies proper seating. Icat image is taken while the CT prosthesis is in the mouth. The icat data is sent to 360 imaging for 3-D reconstruction.</td>
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<td>6</td>
<td><strong>360 imaging &amp; Dr. Kazemi</strong></td>
<td>Once 3-D reconstruction is done, simplant implant treatment planning is completed and verified by Dr. Kazemi. The final treatment plan &amp; data is sent for fabrication of Surgi-guide. For partially edentulous patients, a tooth-borne guide is made on the second study models (M2); for fully edentulous patients, bone-borne guide is made on the CT derived model (no study model necessary). The surgi-guide is sent directly to Dr. Kazemi’s office. Patient schedules for surgery.</td>
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