



PARAGON

IMPLANT ACADEMY & CONSULTING

Dr. Erik Solberg DDS, DABOI, FAAID, FICOI, MaCSD

ParagonImplantAcademy.com

Instructions for Data Collection for an Accurate Digital Surgical Guide

Obtaining a CBCT

- 1) During CBCT capture have the patient bite on cotton rolls to ensure that there is separation of the opposing arch
 - This is especially important if the patient is missing anterior teeth and cannot bite on a bite stick which will normally give you the needed separation. Teeth must have separation to allow the guide to be fabricated and have proper merging of the data in the 3D Guide planning software.
- 2) CBCT Capture should include the full arch of teeth for the tooth in question
 - If you have a terminal tooth in the arch, you may want to take a full upper and lower CBCT to allow a more accurate digital wax up to be done (see #3 on next page).
- 3) If you are referring out for the CBCT, have them return raw DICOM files. You do not want the DICOM files to be tied into a viewer software, as you may not be able to separate the DICOM files from the viewer when you go to import the DICOM files into the Guide planning software.
- 4) Ensure that the patient does not move and that the CBCT unit does not brush up against the patient as to create noise in the CBCT data. Ensure all jewelry is off and RPD's removed.
 - If your CBCT has a 'scout' or test x-ray setting, do this first to ensure that it clears the patient's shoulders and neck
 - Have the patient step forward in the unit to move neck and shoulders forward
 - If the unit is capable of it and the patient is straining to stand in the required position, lower the CBCT unit and allow them to sit in a chair to prevent movement
 - If they are holding onto handles of any sort, you can have them cross their hands to bring their shoulders lower if the shoulder height is causing interference

Obtaining an Impression

*****Know that your guide will be made off of your Impression/STL file. Just like any other area of dentistry, inaccuracy of diagnostic data will result in inaccuracy of the final product *****

- 1) If it is a digital impression, export the file from the intraoral scan software to STL format.
- 2) If it is a traditional impression that has been poured up, ask your laboratory to complete a desktop scan of the impression and return it as an STL.
- 3) If the implant to be placed is the terminal tooth, I recommend completing a wax up that puts the tooth into proper occlusion against the opposing arch either digitally or via a traditional denture tooth set up. In this case the laboratory completes a desktop scan of the completed wax up and returns it as a separate STL file as well (Diagnostic STL).
 - 1) Alternatively, you can have this wax up done digitally, but to have proper occlusion, having a full upper and lower CBCT and impression will be required.
- 4) If the tooth to be replaced has adjacent teeth on either side, completing a digital wax up of the site in software is typically accurate enough without having the full CBCT (without the opposing arch), unless they have a dramatic occlusal discrepancy.
- 5) If a patient has a flipper or other temporary that has proper occlusion, you should impress/intraoral scan the patient with this temporary in the mouth, as well as with it out of the mouth. The scan with the flipper in the mouth can act as the diagnostic set up and will be imported separately into the planning software.