

IMPLANTS

Prosthetic Technique Series

Side 1. - Bar Overdenture

Side 2. - Fixed Removable/Screw Retained Porcelain Bridge

Bar Overdenture

Before Implants Placed

1. Create Surgical Guide

Surgical Guides fabricated by the Aurum Ceramic/Classic Implant Team™ ensure extremely precise placement, resulting in greater longevity and more esthetically pleasing implants. A surgical guide can be created before implant placement by either:

- Making a clear duplicate of patient's existing denture *or*,
- Starting a new denture and taking it to try-in stage, then duplicating the try-in in clear acrylic (NOTE: Save try-in for use after implants have integrated).



Upper and lower models and a bite are required along with an indication of the proposed implant sites. For simple surgical guides, the Implant Team will drill a hole, place a metal cylinder or cut away the lingual of the tooth in the best position for the implant placement. The clear duplicate can be modified to meet clinician's preferences.



This can also be used as a radiographic guide (depending on clinician's preference, ball bearings, short lengths of wire, barium mixed with acrylic or radio opaque teeth can be placed at the proposed implant sites) for CT scans or x-rays in preparation for implant surgery.

After Implants Integrated

2. Take Fixture Level Impression

Take preliminary fixture level polyvinyl siloxane impression (NOTE: Open Tray Impression preferred), impression of opposing dentition and bite if possible. Send to Aurum Ceramic/Classic for use in fabrication of verification matrix consisting of the impression copings luted together with acrylic and then separated with a very thin disc. An occlusal rim (edentulous bar application where required) will also be made.



3. Place Verification Matrix and Take Final Impression

The verification matrix insures exceptional accuracy particularly when working with multiple implants. The matrix is returned in position on the model. Upon receipt, remove from the model and place the separated copings intraorally in the same position, lute the pieces together with Fuji acrylic (less warpage than other acrylics) and take a final Open Tray polyvinyl siloxane (for best accuracy) impression making sure the coping screws are accessible. After the impression has set loosen the screws and remove the impression and return to the lab.

This invaluable step helps ensure the accuracy of the final impression and helps to eliminate the possibility the bar might have to be cut and luted back together at bar try-in stage.



4. Establish the Bite

If try-in of a new denture was done previously, this can be used to mount the master model and begin fabrication of the bar.

Otherwise, a bite-rim that can be screwed onto the implants will be made and a new bite relation taken before the bar is fabricated.



5. Verify Denture Set Up

After the bite is established, Aurum Ceramic/Classic will pour up final soft tissue model and set up teeth with screw-in base for stability. Verify denture set-up via a try-in with the patient for esthetic and bite/occlusal acceptability. The Implant Team will make any requested changes to tooth set up.



6. Bar Fabricated

Bar and processed base will be fabricated (with locator attachments installed) based on verified try-in. Set up will be transferred to bar in wax and sent to the dental office for a final try-in of the bar and set-up. Check for passive fit, esthetics and acceptable bite.



7. Final Prosthesis Processed

Once final try-in approved by doctor and patient, final removable or fixed denture will be processed. The prior careful verifications of fit and esthetics will result in a very straightforward insertion appointment.



Fixed Removable/Screw Retained Porcelain Bridge

Before Implants Placed

1. Create Surgical Guide

Surgical Guides fabricated by the Aurum Ceramic/Classic Implant Team™ ensure extremely precise placement, resulting in greater longevity and more esthetically pleasing implants. A surgical guide can be created before implant placement by either:

- Making a clear duplicate of patient's existing denture *or*;
- Starting a new denture and taking it to try-in stage, then duplicating the try-in in clear acrylic (NOTE: Save try-in for use after implants have integrated). A Crown & Bridge wax-up can also be utilized.



Upper and lower models and a bite are required along with an indication of the proposed implant sites. For simple surgical guides, the Implant Team will drill a hole, place a metal cylinder or cut away the lingual of the tooth in the best position for the implant placement. The clear duplicate can be modified to meet clinician's preferences.

This can also be used as a radiographic guide (depending on clinician's preference, ball bearings, short lengths of wire, barium mixed with acrylic or radio opaque teeth placed at proposed implant sites) for CT scans or x-rays in preparation for implant surgery.

After Implants Integrated

2. Take Fixture Level Impression

Take preliminary fixture level polyvinyl siloxane impression (NOTE: Open Tray Impression preferred), impression of opposing dentition and bite if possible. Send to Aurum Ceramic/Classic accompanied by an x-ray showing the impression copings seated on the implants.



3. Verification Matrix fabricated based on impression and x-ray

The Aurum Ceramic/Classic Implant Team will fabricate a verification matrix consisting of the impression copings luted together with acrylic and then separated with a very thin disc.



4. Place Verification Matrix and Take Final Impression

The verification matrix insures exceptional accuracy particularly when working with multiple implants. The matrix is returned in position on the model. Upon receipt, remove from the model and place the separated copings intraorally in the same position, lute the pieces together with Fuji acrylic (less warpage than other acrylics) and take a final Open Tray polyvinyl siloxane (for best accuracy) impression making sure the coping screws are accessible. After the impression has set loosen the screws and remove the impression and return to the lab.

This invaluable step helps ensure accuracy of the final impression and helps to eliminate possibility bar might have to be cut and luted back together at bar try-in stage.

5. Establish the Bite

If wax-up or try-in was done previously, this can be used to mount the master model and begin fabrication of the framework. Otherwise, a bite-rim that can be screwed onto the implants will be made and a new bite relation taken before the framework is fabricated.



6. Verify Implant Placement

After the bite is established, check the implant placement. All implants must emerge

through the occlusal of posterior teeth or cingulum of anterior teeth. This will allow the screw-retained bridge to be fabricated and placed relatively easily.

If there is a divergence in the implants, this may necessitate a change in the overall treatment plan. Early detection of the challenge may still allow the fabrication of a super structure that will have set screws on the lingual (allowing the bridge to remain screw retained albeit at a potentially higher cost than originally planned).



7. Bridge Substructure Fabricated

Bridge substructure will be fabricated and preferably sent to the dental office for a final try-in of passive fit, esthetics and bite/occlusal acceptability. The substructure can also be fabricated to bisque bake or even finalized. NOTE: If the access hole angulation is too great, a special flat head screw and precise driver head must be utilized to allow for adequate torquing.



8. Final Prosthesis Processed

Once final try-in approved by doctor and patient, final Fixed Removable/Screw Retained Porcelain Bridge will be processed. The prior careful verifications of fit and esthetics will result in a very straightforward insertion appointment.



Calgary
1-800-661-1169

Edmonton
1-800-661-2745

Saskatoon
1-800-665-8815

Vancouver
1-800-663-1721

Victoria
1-800-663-6364

Kelowna
1-800-667-4146

Vernon
1-800-663-5413

Ottawa
1-800-267-7040

Toronto
1-800-268-4294



© Aurum Ceramic Dental Laboratories Co. (2008).
Reproduction of this work in whole or in part, by any means whatsoever, is strictly prohibited
without the express written consent of Aurum Ceramic Dental Laboratories Co.



Prepared in conjunction with the Aurum Ceramic/Classic Dental Advisory Board.