“Taking the Mystique out of Implant Dentistry”

Dr. Michael Weinberg
B.Sc., DDS, FICOI
What is Restorative Implant Dentistry?

- Restorative implant dentistry involves taking a few simple mechanical principles.
- In conjunction with dental restorative techniques.
- Combined with the ability to work with parts, screwdrivers, and wrenches.
- Designed to bring patients back to optimal oral health and function.
Implant Dentistry is NOT Voodoo!
Why are more GP’s NOT doing restorative implant dentistry?
Lack of established “Comfort Zone”

• Inadequate training and lack of confidence
• Previous cases didn’t work out well
• Suffered economic loss in previous case
• Uncomfortable recommending more expensive types of treatment
It doesn’t have to be this way.

Just follow a plan
Treatment Plan & Consultation

Implant Placement

Restoration of the Implant(s)

Maintenance
Implant placement should be restorative driven

- The patient has to agree to have implants and is comfortable with the possible fees
- You have to then design the case
- Discuss actual costs with the lab
- Discuss the case with the specialist
- You are the Team Leader!
The Diagnostic Work-Up

A diagnostic wax-up and a radiographic/surgical stent are crucial components of the work-up that must be done when treatment planning for multiple implant supported restorations.
The Diagnostic Wax Up

Wax in the missing teeth
Stents can be made in a variety of styles and from different materials

- A hard acrylic processed shell
- A vacuform matrix
Pre-op protocols

- Pre-op models and surgical template
- Referral to radiologist and Tomograms
- Informed consent signed by patient
- Pre-op Rx given to patient
- Pre and post-op instructions given to patient
I’m so confused!
What parts do I need?
The parts needed for impression taking are standard for most implant systems. The transfer copings and analogs correspond to the head of the implant. Different screws and screw drivers may be required for different implant systems. Consult the restorative catalogue for the system that you are using.
Implant manufacturers are making their catalogues more user friendly and easier to read. Most catalogues are now sectioned first by implant type, then size, and finally restorative option.

A page from the 3i catalogue
When it comes to restoring dental implants, follow the “KISS Rule” and you can’t go wrong.

Keep
It
Simple
Silly
Implant

Fixture level impression

Custom UCLA Abutment(s) screwed in to implant

C & B impression

Cemented PFM crown/bridge
Healing cap removed after 4 months. Look at the great tissue response!
Impression Techniques

There are two main types of impression techniques

Open Tray

Closed Tray
Open Tray Technique

Remove the healing cap and screw in impression coping

The impression coping remains in the Impression upon tray removal
Closed Tray Technique

Remove the healing cap and screw in impression coping

The impression coping remains in the mouth upon tray removal
Placement of closed tray
Impression Coping

Impression coping screwed into place
Take an X-Ray to verify the fit of the transfer coping!
What to look for in the x-ray

Not seated

Note the dark line between the two pieces

Fully Seated

Note the seamless joint between the two pieces
The lab will pour the impression and fabricate a soft tissue model.
Soft Tissue Model
What is a UCLA Abutment?

The UCLA abutment is a custom abutment that will correct any problems with angulations that occurred at the time of surgery. It also gives the clinician and the lab total control of the position of the margins relative to the gingival level and emergence profile.
UCLA Abutments come either hexed or non-hexed with either a gold machined made fitting surface or a totally plastic base that will be cast in metal.
The fitting surface is what will rest on top of the head of the implant. The hexed base is used for anti-rotation for single units while the non-hexed are used for splinting or bridgework.
The UCLA abutment is placed on the fixture replica in the model and cut down to the correct height and then contoured with wax to create the correct form.
Fixation Screws

They are made from different materials, such as stainless steel, titanium, or a gold alloy.

They also have different heads to them such as hexed, square and star.

Different screw heads require different torque strengths
Tooth #23 with a custom UCLA abutment secured into place with a gold square head screw.
Take an x-ray to verify the fit of the abutment to the implant head!

Note, there is no black line visible.
Tooth #23 with a temporary crown cemented for one month.
Impression taking around implants

Instead of retraction cord consider using EXPASYL, which is a paste that is injected into the sulcus between the tissue and the margin of the abutment. Follow the manufacturer’s instruction and watch the video on Kerr’s website. There is a learning curve with this material but it is a phenomenal material for all C & B impressions.
Expa-syl

Injection gun

Injection tip

Injected material
Expa-syl

Tissue retracted

Inside impression
What do we charge the patient?

- Surgical fee per implant = $1700.00
- Parts for the UCLA abutments and gold screw = $300.00
- Outside lab fee for fabrication of the abutment, temp crown and permanent crown = $1000.00
- Professional fee for the crown = $1100.00
- Total estimated fee will be approximately $4100.00 per crown
- Not included- Tomograms, temp prostheses and reusable parts
Simple and straightforward. That's how it should be done!
Three implants placed in their ideal positions
Healing abutments and sutures in place
Custom UCLA abutments screwed into place
Splinted crowns and cantilevered pontic cemented into place
Note, there is no black line visible between the abutments and the implants.
Don’t let the proximity of the maxillary sinus dissuade you from recommending implants. Many times the sinus floor can be lifted in a relatively atraumatic procedure.
Pre-op panoramic film of #15 and #16 prior to extraction and implant placement.
Membrane and sutures placed for complete closure
Post-placement PA with sinus lift of #16
What about dentures?
Four implants with bar & attachment supported denture design
Bar designs need to allow for proxibrush cleaning
Male attachments provide retention.

Acrylic sits directly on the bar to give support.

Male components processed into denture.
Four implants with a tissue born denture design
Bar with UCLA abutments screwed in place
Periapical radiograph confirms fit of abutments to implants

Once again there is no black line visible between the abutments and the implants
Gold clips embedded into underside of denture

Gold clips provide retention

Acrylic free end extensions provide support

Gold clips embedded into underside of denture
Final prostheses inserted. Patient very satisfied
What do we charge the patient?

- Surgical fee for 4 implants @ $1700.00 per implant = $ 6800.00
- Tomograms, if necessary, = $ 300.00-$500.00
- Outside lab fee for fabrication of the bar (CAD/CAM) and both dentures = $ 5800.00
- Professional fee for the bar = $ 2000.00
- Professional fee for the CUD/CLD = $ 3000.00
- Total Estimated fee will be approximately $ 17,000.00
“I love it when a plan comes together....”
Old bridge needs to be removed and tooth #15 needs to be extracted.
Healing caps demonstrate ideal implant placement
Custom UCLA abutments secured in place
Implant splinted crowns #14 & #15 attached to pontic #16 and natural tooth #17 with a stress breaker attachment with a single crown on #13.
Note, there are no black lines visible between the abutments and the implants.
I love it when a plan comes together...."
When the situation is not ideal.....
The root of tooth #13 needs to be extracted.
Immediate implant placement after extraction
Locator attachment built into custom abutment
Inside view of the unilateral removable appliance retained with a locator attachment and distal semi-resilient attachment
Occlusal view of functioning appliance
Sometimes we might sacrifice a little of the aesthetics to create function and gain comfort
As dental implants gain in popularity, more and more dentists are recommending them as a treatment option to their patients. Implant dentistry can be a challenging, as well as a very rewarding part of your dental practice. Like most things, with perseverance and determination will come experience and greater confidence.
If you have any questions about any of these slides, you can call Dr. Weinberg @ 416-920-8800 or e-mail: mweinberg@implantsdentistry.com
At Klausz Dental Laboratory, we are continuously improving on the quality of the restorations and the services we offer our clients. This is why we have committed ourselves to providing our clients with the most advanced techniques as well as technical knowledge needed for you to succeed in the field of restorative implant dentistry.