



LARELL *One Step Denture*TM

The Alternative Denture



July 2016

Speaker– Lawrence N Wallace DDS

- DDS University of Illinois College of Dentistry
- Oral Surgery Residency Long Island Jewish Medical Center
- Board Certified Oral and Maxillofacial Surgery
- Private Practice in Oral and Maxillofacial Surgery
- VP Dental utilization review firm
- President and CEO, Larell Surgical Consultants
- Developer and Founder, The Larell One Step Denture

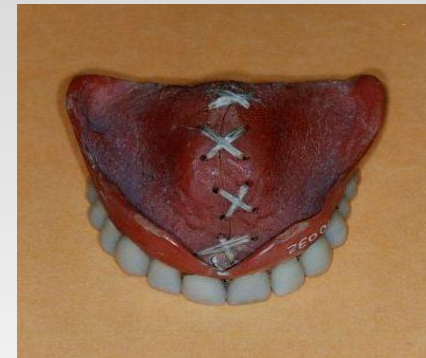
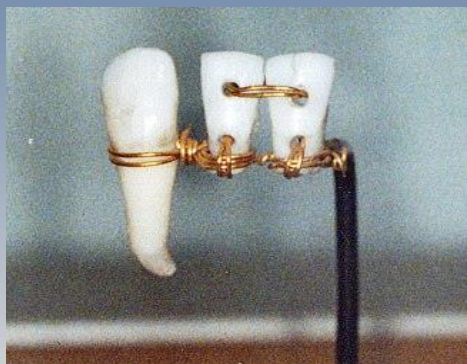
Discussion Points

- Introduction
- Current Denture Market
- Scientific background
- The Larell One Step Denture
- Case Studies
- Incorporating Larell into your practice



Dentures = 16,200,000 results

The History of Dentures



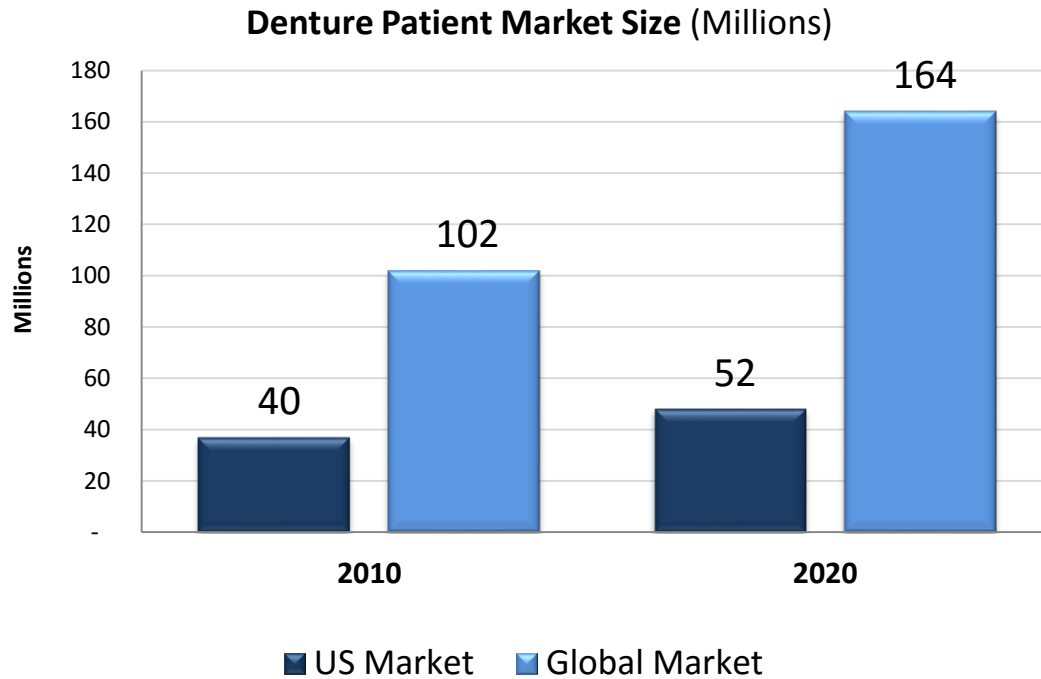
Denture Usage

- ✓ 37-40 Million edentulous currently in the US
- ✓ Only 90% of the edentulous wear dentures
- ✓ The percentage decline in edentulism will be more than offset by the 79% increase in the adult population over 55.
- ✓ Dentists will find a sizeable minority of the patient population will continue to need complete denture services.

Will there be a need for complete dentures in the United States in 2020?

Douglass CW Shih A Ostry L J Prosthetic Dentistry 2002 Jan;87(1):5-8

Denture Demographics



Scientific Principles of Complete Dentures

**Felton DA Texas Dental Journal Apr
2010**

...complete edentulism... **continues to represent a tremendous global health care burden**, and will for the foreseeable future.

Standard of Care – The Larell Denture

- Adherence to Scientific Principles and classic prosthodontic literature
- Professionally accepted materials
- Patient satisfaction results
 - ✓ Fit
 - ✓ Form
 - ✓ Function

Standard of Care – The Larell Denture

- Adherence to Scientific Principles and classic prosthodontic literature
- Professionally accepted materials
- Patient satisfaction results
 - ✓ Fit
 - ✓ Form
 - ✓ Function
 - ✓ Meet Patient's expectations

Patient Expectations

**It isn't all about the
occlusion**

Expectations and Final Evaluation of complete dentures by patients, dentist and dental technician

MARACHLIOGLOU, DOS SANTOS, CUNHA and MARCHINI

Journal of Oral Rehabilitation

Volume 37, Issue 7, July 2010, Pages: 518–524

20 completely edentulous patients, a Prosthodontist and a dental technician provided scores for the expected aesthetic and functional results of their dentures:

- **Patients presented higher expectations regarding their dentures than dental professionals.**
- The dentist believed that dentures would bring fewer benefits than patients did, but his perception of denture benefits post-treatment was significantly higher than his expectations.

Patient Expectations



Patient Expectations



Patient Expectations



Patient Expectations



Patient Expectations

Dentures are not a replacement for teeth... They are a replacement for NO teeth

Factors Associated with Successful Denture Therapy

Roberta L.Diehl, Ulrich Foerster, Venitta Sposetti, and Teresa Dolan
Journal of Prosthodontics, Vol 5, No2 (June), 1996, 84-90

- Purpose: Evaluate denture patients after delivery to develop an explanatory model of successful denture therapy
- 60 patients treated at a dental school
- Pre and post treatment questionnaires and interviews (6 month and 18 month intervals)
- **Expectations measured for comfort, fit, chewing ability, appearance and speaking ability**

Factors Associated with Successful Denture Therapy

Roberta L.Diehl, Ulrich Foerster, Venitta Sposetti, and Teresa Dolan
Journal of Prosthodontics, Vol 5, No2 (June), 1996, 84-90

- Psychological and Interpersonal Factors are more important determinates of denture satisfaction than anatomic or clinical factors
- Patients that are well adjusted emotionally, + self image, - depression adjust with greater ease to new dentures
- **Satisfaction of care received, cost of service, convenience in access to care, interpersonal relationship with the dentist are as important as comfort, fit and function**

Dentures in an Hour

Does it meet Standard of Care?

Standard of Care:

standard, n. that which is established by authority, custom, or general acceptance as a model; criterion.

*guides practice and may be used to evaluate performance.

Factors Associated with Successful Denture Therapy

Roberta L. Diehl, Ulrich Foerster, Venitta Sposetti, and Teresa Dolan
Journal of Prosthodontics, Vol 5, No2 (June), 1996, 84-90

- **76.7%** satisfied with their dentures
- **74.6%** expectations had been met
- **67%** said they adjusted easily at 6 months
- **78%** said they adjusted easily at 18 months
- Age, gender, race, income level, education, marital status and maxillary and mandibular anatomy were not significantly associated with denture success within this study

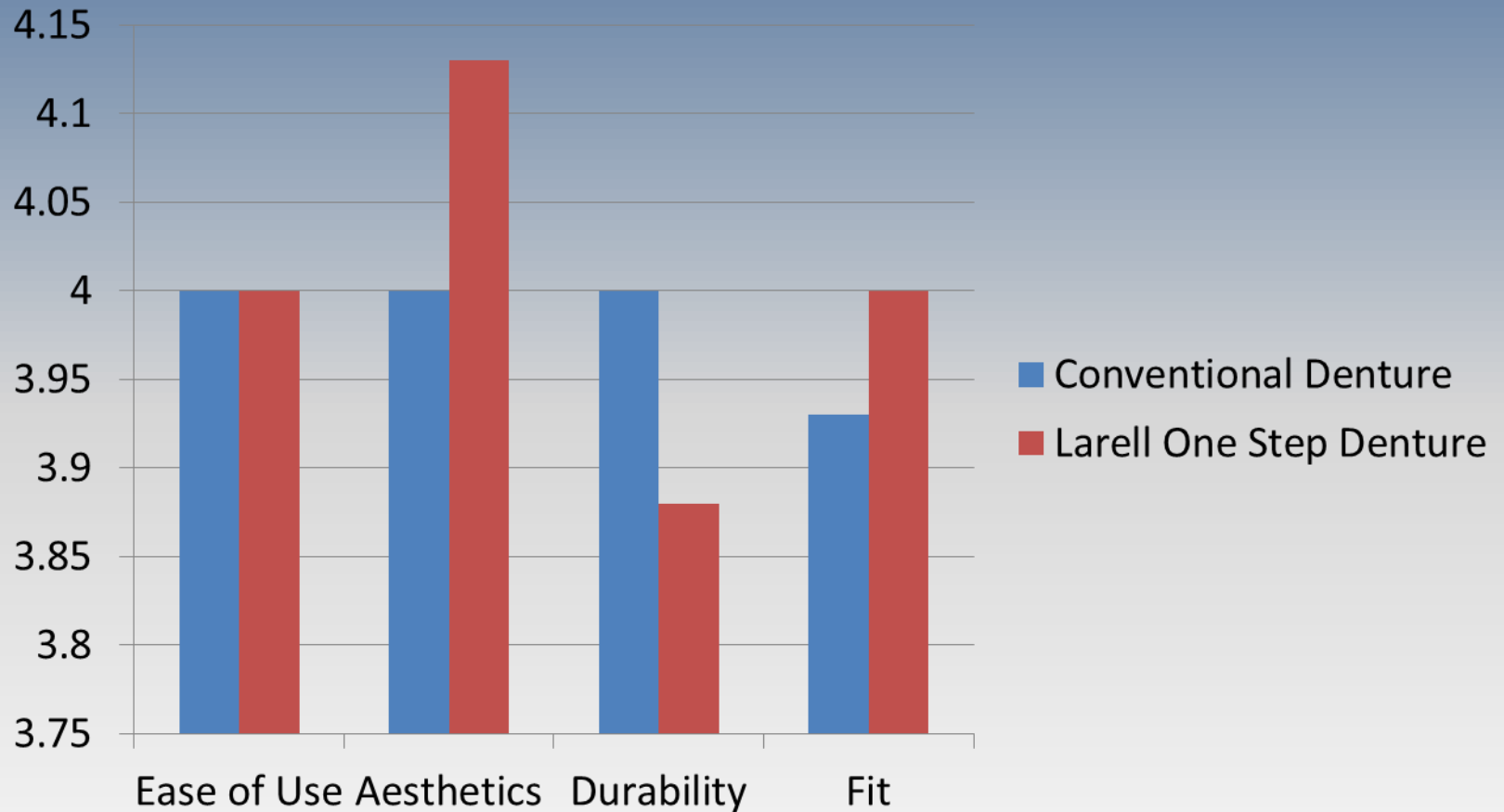
Survey of Larell Patients

- 69 patients surveyed: 61 responding
- Telephone interview and post-op evaluation
- 11% previous denture wearers
- **83.6%** overall satisfaction with their dentures
- **98.4%** pleased with appearance
- **80.3%** chew comfortably
- **83.3%** reported feeling healthier
- Patient demographics consistent with previous study

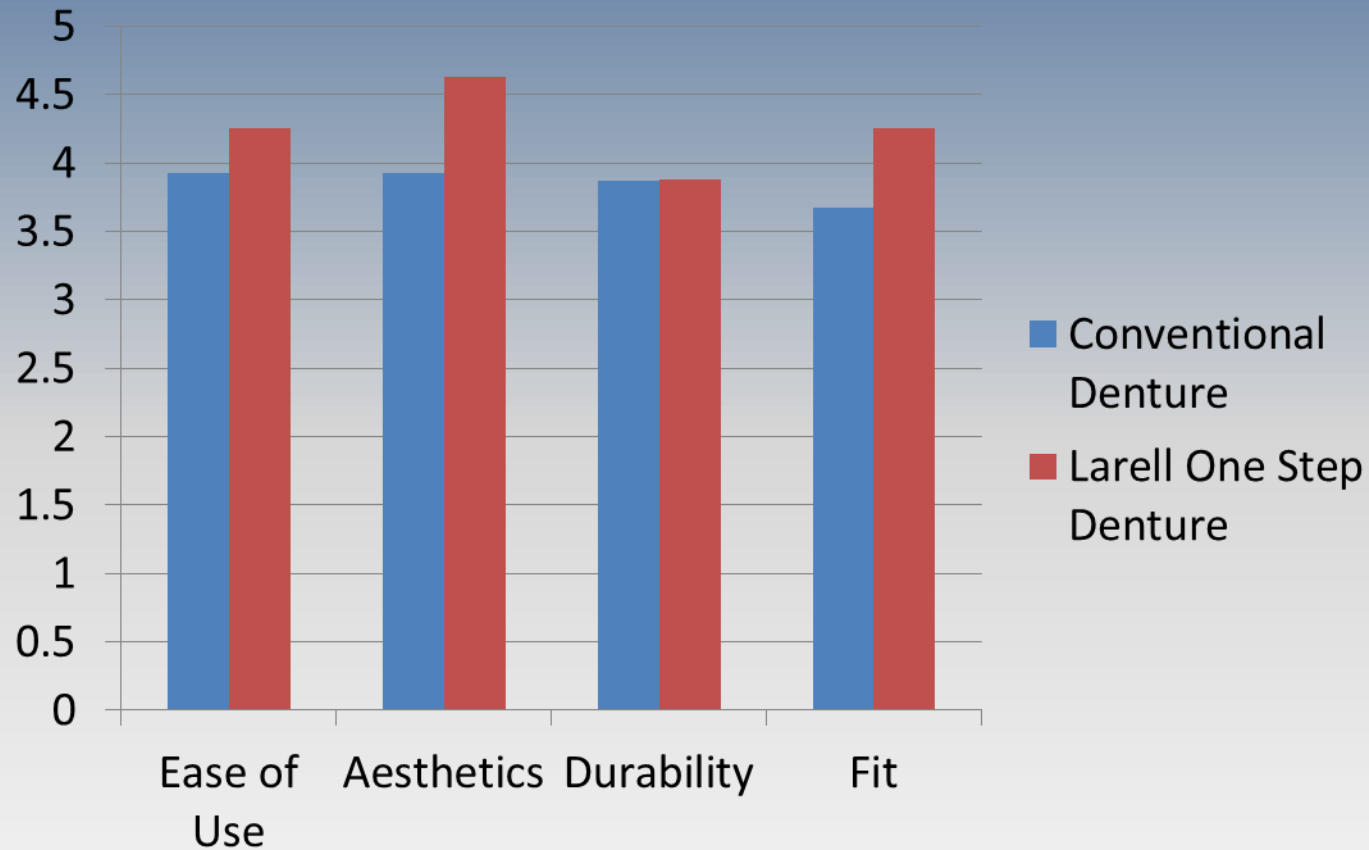
Comparison of Satisfaction Rates of Providers and Patients of Conventional Dentures and Larell One Step Dentures

- Survey conducted at 15 sites by the Virginia Health Care Foundation 2014

The Larell Denture Survey-Provider Satisfaction



The Larell Denture Survey-Patient Satisfaction



The Larell One Step Denture

In the current economy it is becoming more difficult for thousands to obtain dentures.

There is an increasing demand for cost effective procedures

The Larell One Step Denture

- Innovative method of denture fabrication
- Revolutionary lower-cost, one-visit solution
- Opens unserved and underserved markets due to its:
 - Portability
 - One visit fabrication
- Intuitive, easy to learn technique

Market Sectors

- Private Practice
- Skilled Nursing Facilities
- Assisted Living Residences
- Working population without insurance benefits
- Mobile Dental Clinics
- Safety Net Clinics
- Free dental clinics/Mission of Mercy

The Larell One Step Denture

Clinical situations to use the Larell denture

- ✓ Complete Dentures
- ✓ Immediate Dentures
- ✓ Implant Overdentures
- ✓ Emergency Dentures
- ✓ Spare Dentures

The Larell One Step Denture

Clinical situations to use the Larell denture

- ✓ **Complete Dentures**
- ✓ Immediate Dentures
- ✓ Implant Overdentures
- ✓ Emergency Dentures
- ✓ Spare Dentures

Larell Results

Wise VA MOM Clinic August 2011	100	dentures
VA Dept of Health clinic August 2011	92	dentures
CA MOM Clinic October 2013	102	dentures
CA MOM Clinic October 2014	104	dentures
CA MOM Clinic March 2015	98	dentures
AZ MOM Clinic December 2015	119	dentures

Our Patients



Conventional Denture vs. Larell Denture

Conventional denture

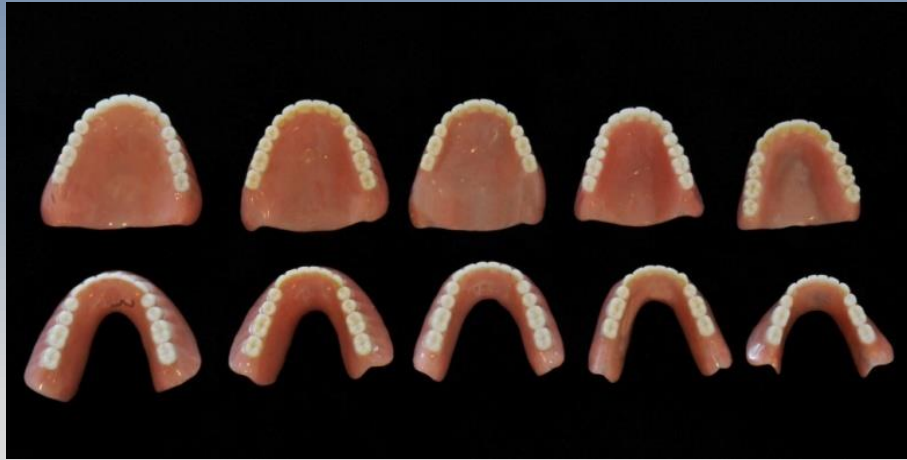
- Made in dental office
- Made in 4-5 visits
- Total time 3-4 hours
- \$200 - 400 lab cost
- Retail \$3000-5000 per set

Larell One-Step Denture

- **Can be made anywhere**
- **Made in 1 visit**
- **Total time about 1 hour**
- **No lab cost**
- **Retail \$1,200 per set**

The Larell One-Step Denture System

- Multiple size pre-formed patented dental templates



- Available in shades B65, B1
- Accommodates 99% of edentulous population
- Templates made in the **US** from all **US made materials**

Denture Placement Technique

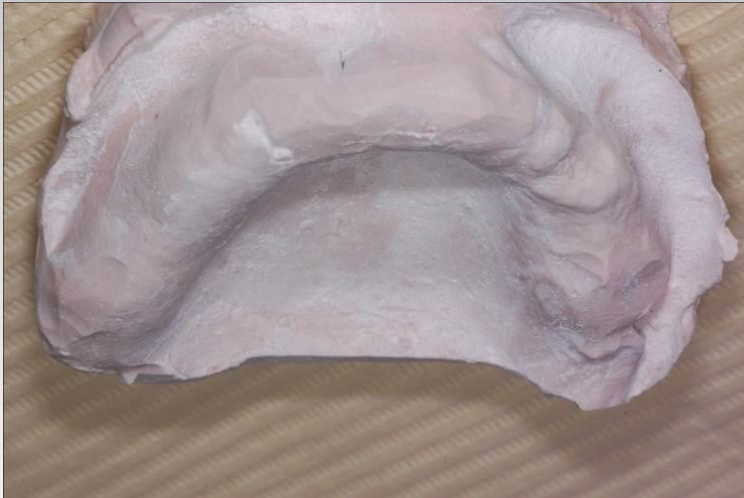


Denture Templates



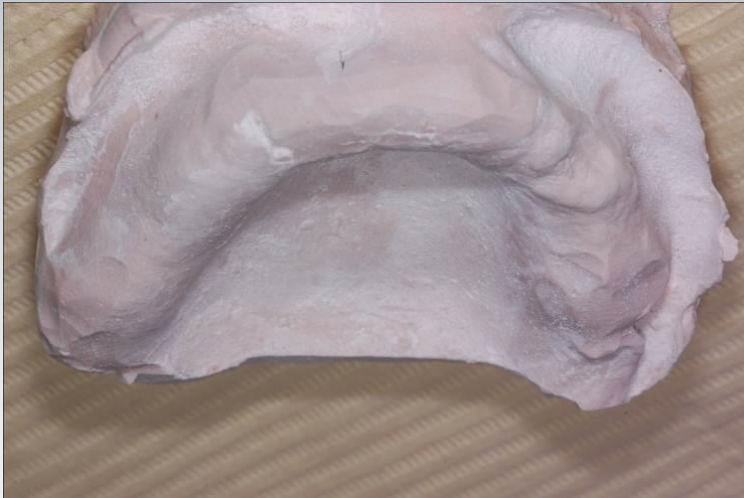
Denture Placement Technique

- Start with quick set stone model
- Choose closest template size



Denture Placement Technique

- Start with quick set stone model
- Choose closest template size



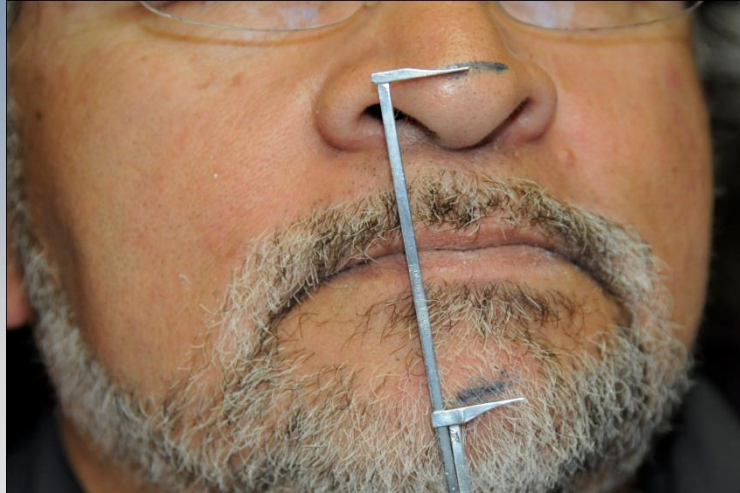
Denture Placement Technique

- After heating in boiling water for 30 seconds, the template can be molded to the palate, flanges, tuberosities, retromolar pads.
- Frenum attachments and other impingements on the template are relieved at this time



Denture Placement Instructions

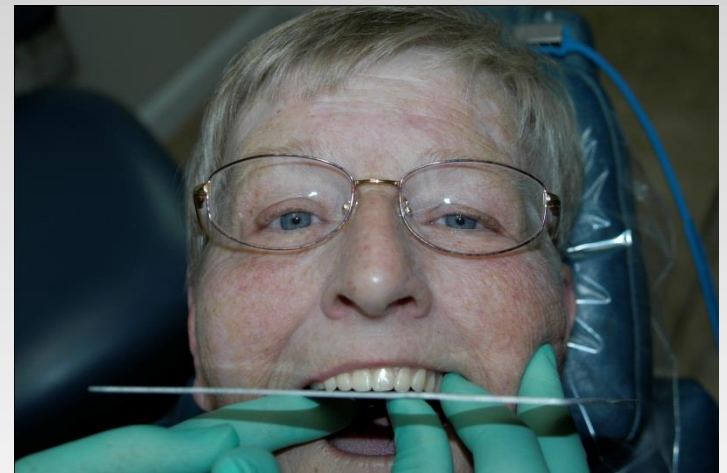
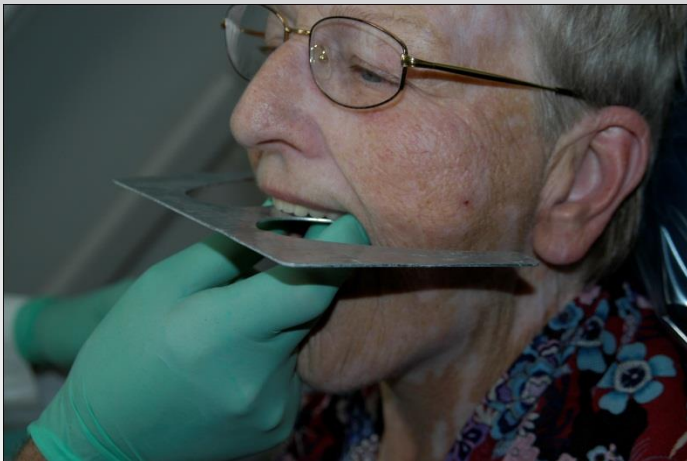
- Check vertical dimension in standing relaxed position



- Final vertical to be 2 mm less than initial measurement

Denture Placement Instructions

- Position upper template in mouth
Anterior/posterior (ala tragal line): Occlusal plane
Occlusal cant: Occlusal plane
Tooth Show: **Visual**
Lip Support: **Visual**



Denture Placement Instructions

- Obtain quick pour model of jaw
- Prepare upper template
- Reline upper template
- Try in lower template
- Reline lower template
- Use PIP paste and articulating paper
- Finish and polish

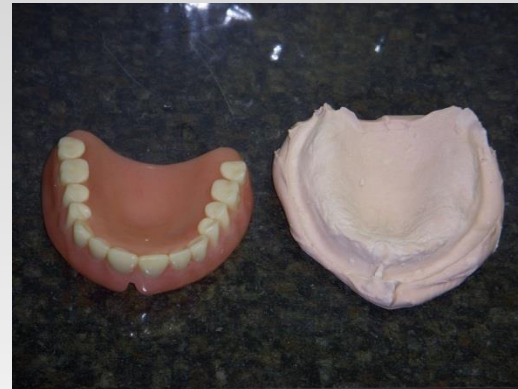
Templates-Before and After



Denture Placement Instructions



Case Study – Complete Denture



Case Study – Complete Denture



Case Study – Complete Denture



Case Study – Complete Denture



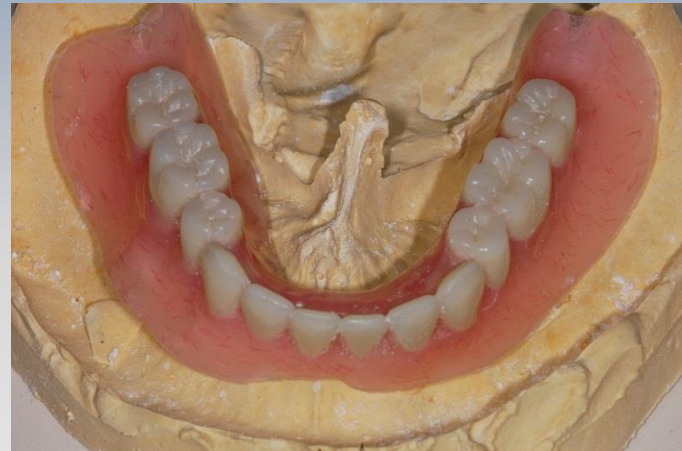
Case Study – Complete Denture



Case Study – Complete Denture



Case Study – Complete Denture



Case Study – Complete Denture



Template Customization

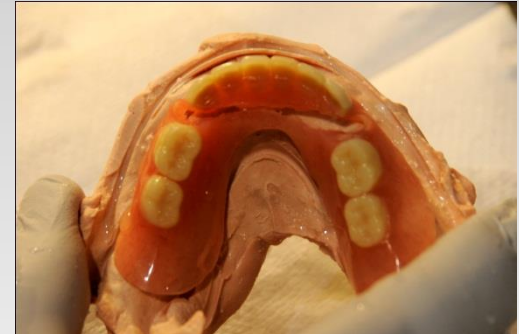
Teeth not over ridge – Heat template and move teeth slightly. If more movement is needed then cut notch in template and move segment over ridge.



Occlusal plane canted on template try in – Place stops inside upper template to level occlusion prior to reline.

Template Customization

Unable to achieve ideal class I occlusion – Not all circumstances will allow an ideal class I occlusion. There may be a posterior crossbite or edge to edge occlusion. This is not an issue with monoplane teeth



Trouble Shooting

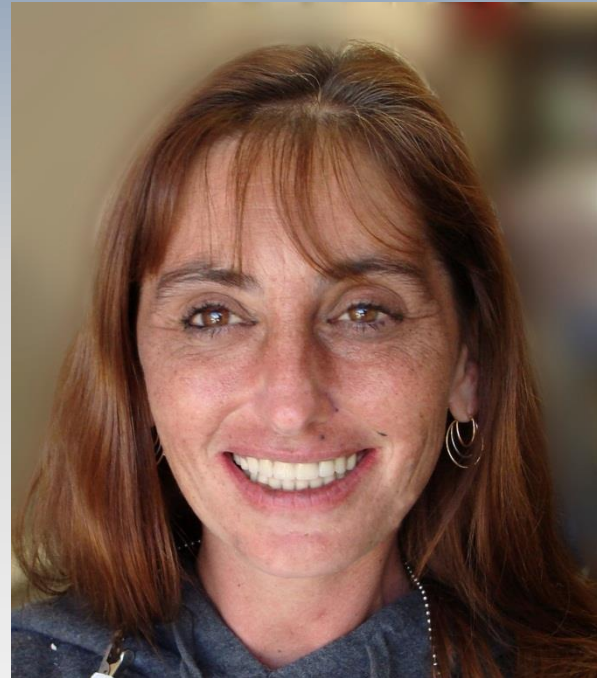
Poor retention of lower template – Use soft reline material, add mylohyoid flange extensions, consider the use of mini implants.

Lack of suction on upper template – Add post dam using reline material.

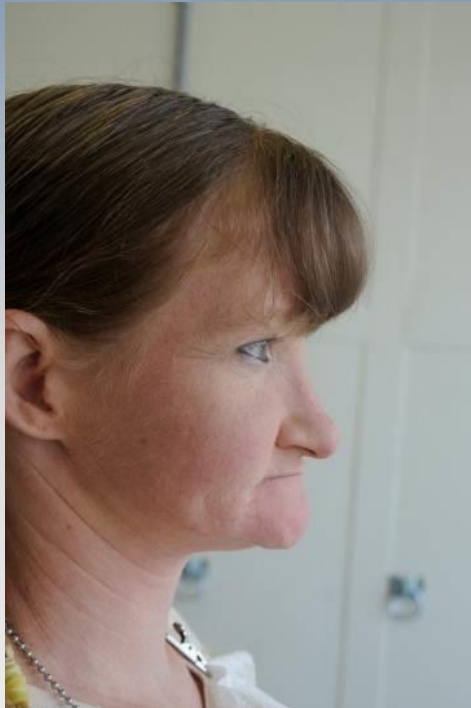
Gingival color too light – Add ink to reline liquid before mixing



“Cosmetic” Dentures



“Cosmetic” Dentures

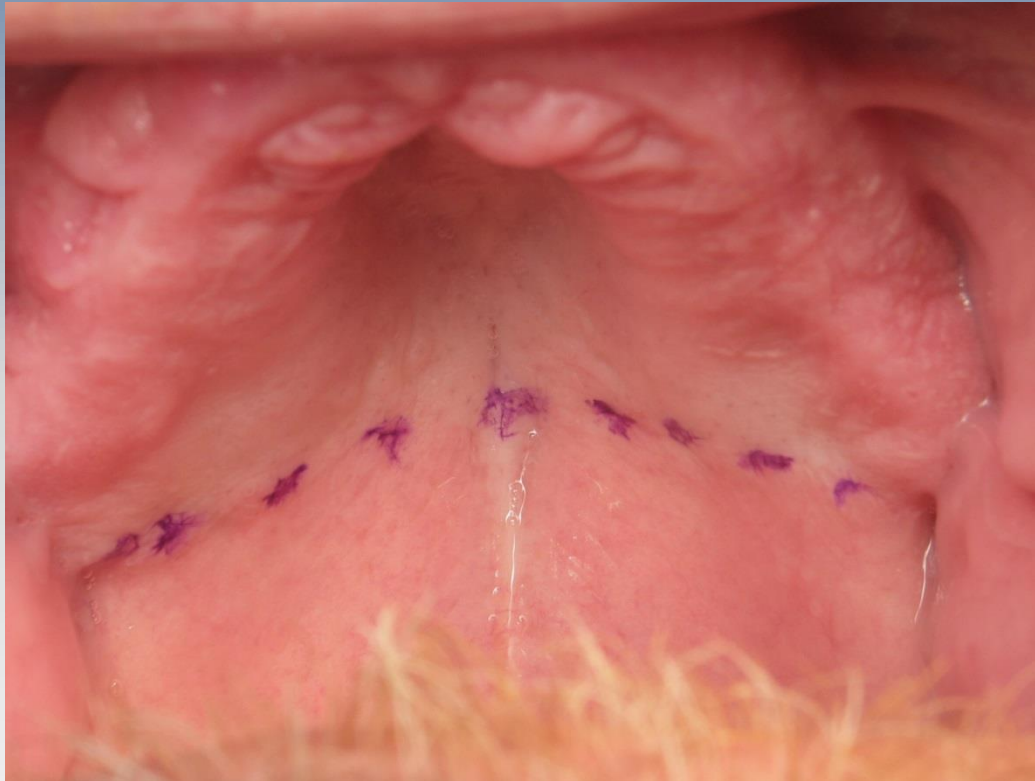


Full Denture Case

Case Study – Full Denture



Case Study – Full Denture



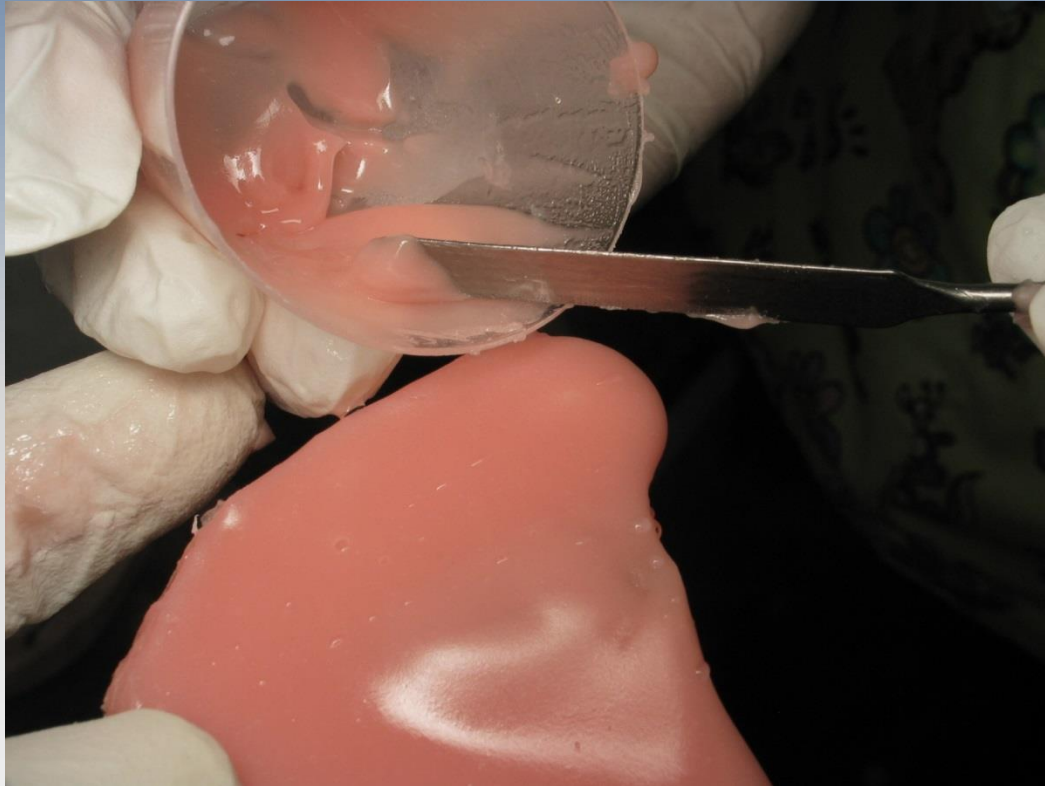
Case Study – Full Denture



Case Study – Full Denture



Case Study – Full Denture



Case Study – Full Denture



Case Study – Full Denture



Case Study – Full Denture



Case Study – Full Denture



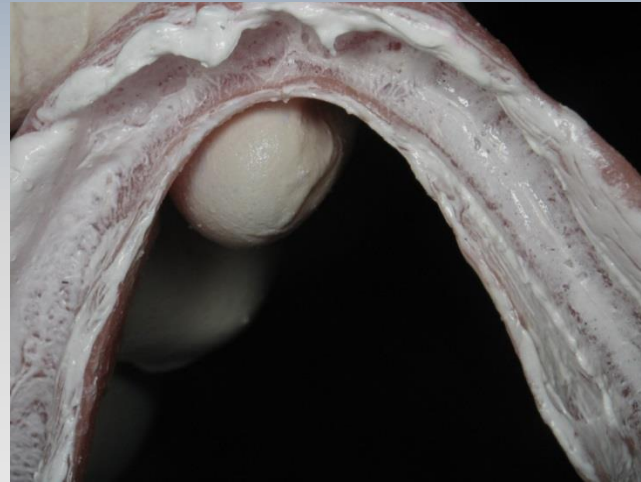
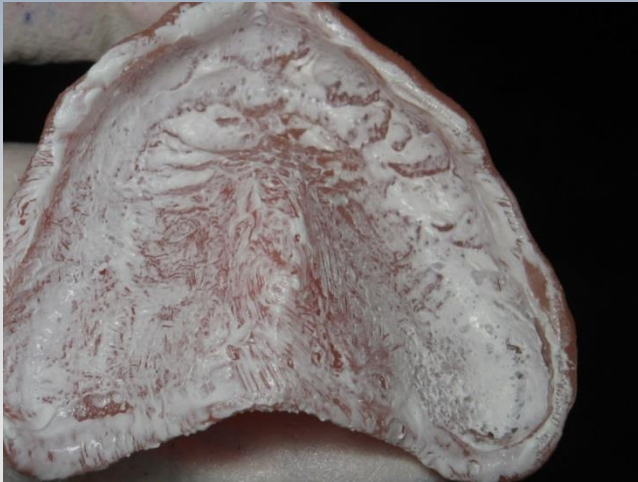
Case Study – Full Denture



Case Study – Full Denture



Case Study – Full Denture



Case Study – Full Denture



Case Study – Full Denture



Case Study – Full Denture



Case Study – Full Denture



Case Study – Full Denture



Case Study – Full Denture



Case Study – Full Denture



Immediate Upper Denture

Case Study – Immediate Denture



- Vertical already established
- Lower occlusion to be balanced to upper

Case Study – Immediate Denture



Case Study – Immediate Denture



Case Study – Immediate Denture



Interim Immediate Denture

Case Study – Interim Immediate Denture



Case Study – Interim Immediate Denture



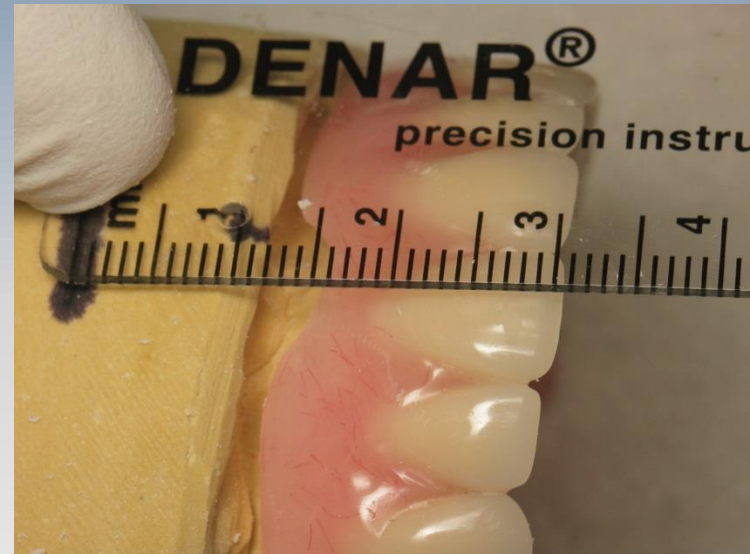
Case Study – Interim Immediate Denture



Case Study – Interim Immediate Denture



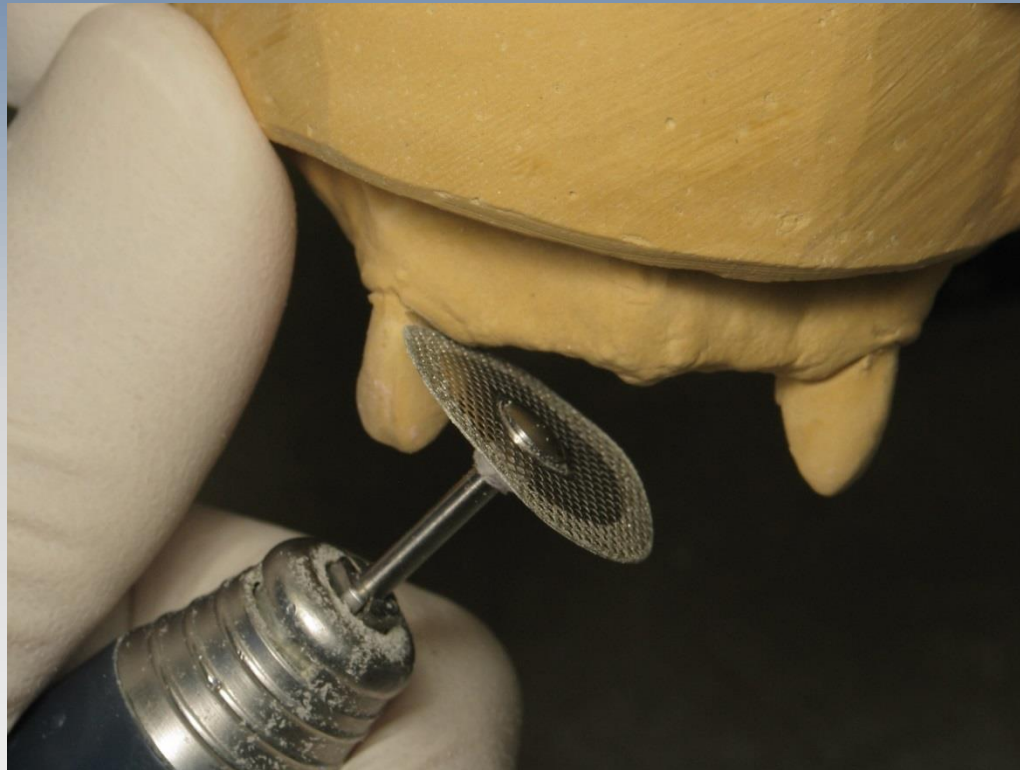
Case Study – Interim Immediate Denture



Case Study – Interim Immediate Denture



Case Study – Interim Immediate Denture



Case Study – Interim Immediate Denture



Case Study – Interim Immediate Denture



Case Study – Interim Immediate Denture



Case Study – Interim Immediate Denture



Case Study – Interim Immediate Denture



Case Study – Interim Immediate Denture



Case Study – Interim Immediate Denture



Case Study – Interim Immediate Denture



Case Study – Interim Immediate Denture



Case Study – Interim Immediate Denture



Case Study – Interim Immediate Denture

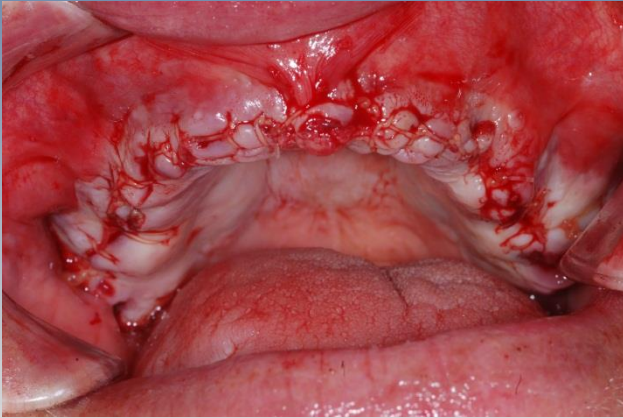


Maxillary Immediate Denture Placement

Case Study – Immediate Denture



Case Study – Immediate Denture



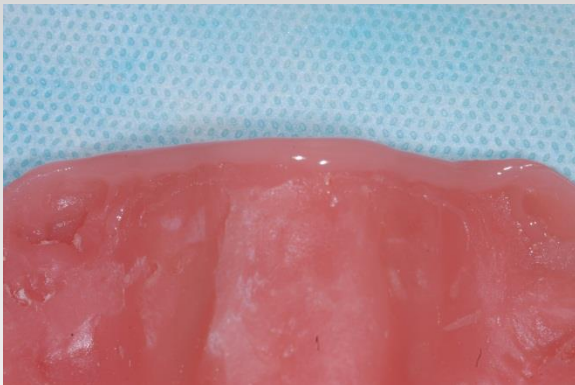
Case Study – Immediate Denture



Case Study – Immediate Denture



Case Study – Immediate Denture



Case Study – Immediate Denture



Alternative Technique

Laboratory Processed Denture

Pre Op Models



Post Op Models



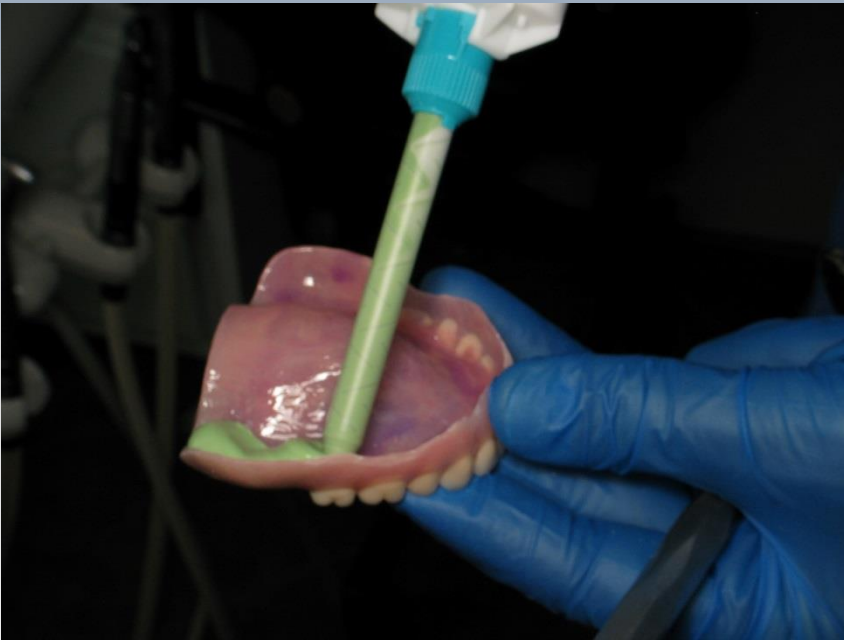
Modified Templates



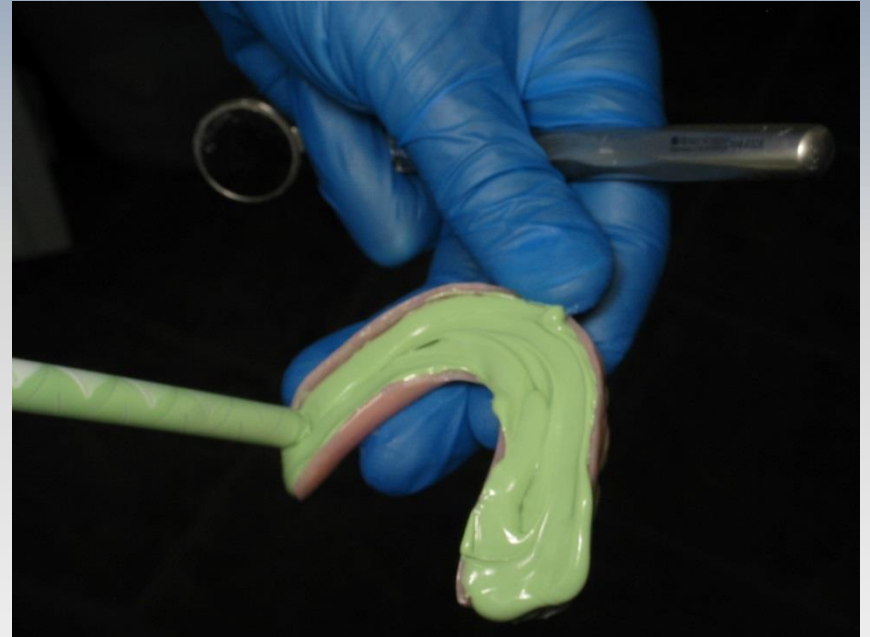
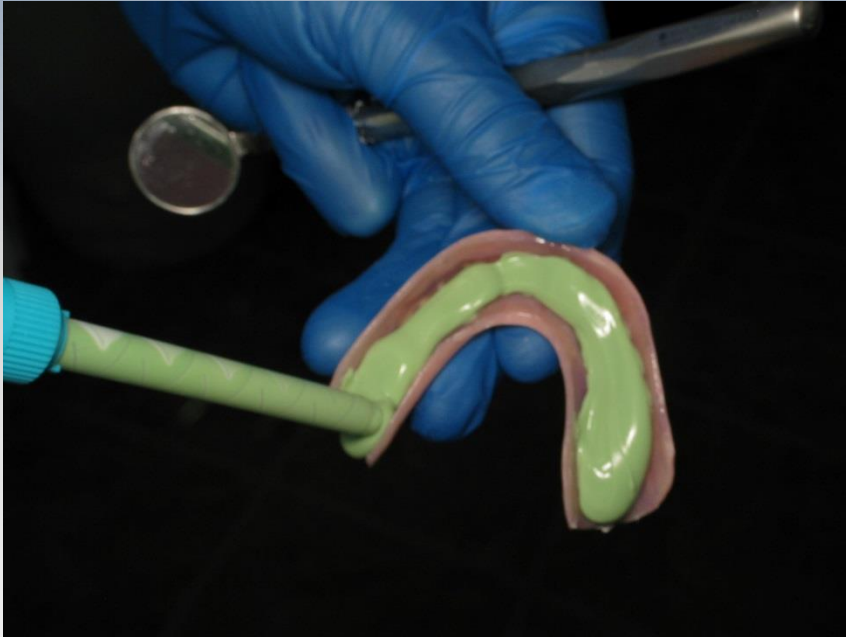
PVS Adhesive Placed



Maxillary PVS Impression



Mandibular PVS Impression



Impressions and Bite Record



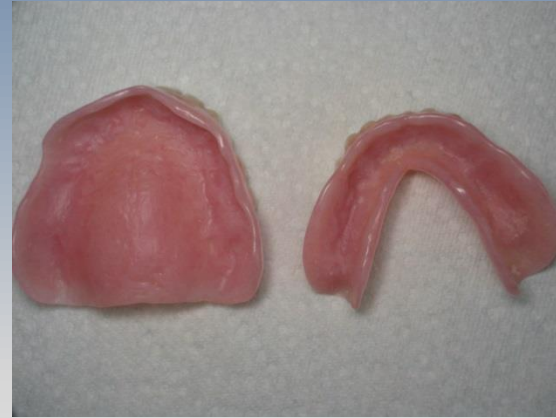
Impressions Sent to Lab



Lab Reline Master Casts



Completed Lab Processed Templates



Remake Implant Overdenture

Case Study – Remake Implant Overdenture



Case Study – Remake Implant Overdenture



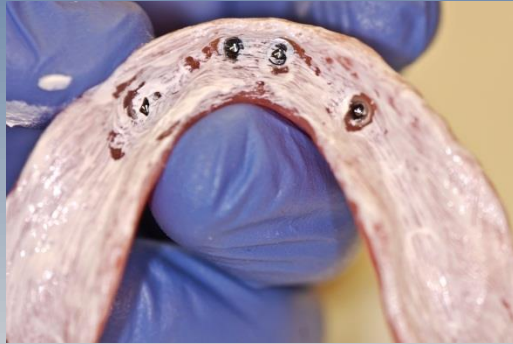
Case Study – Remake Implant Overdenture



Case Study – Remake Implant Overdenture

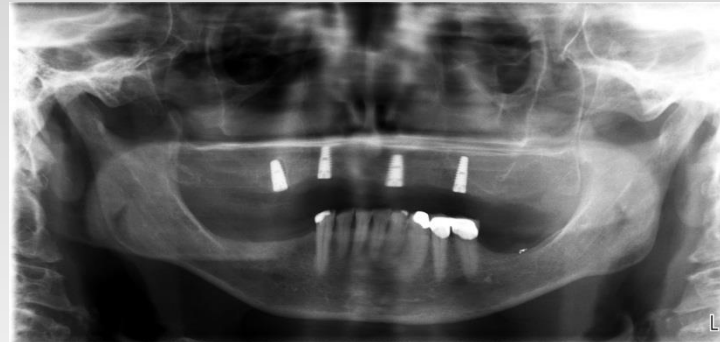
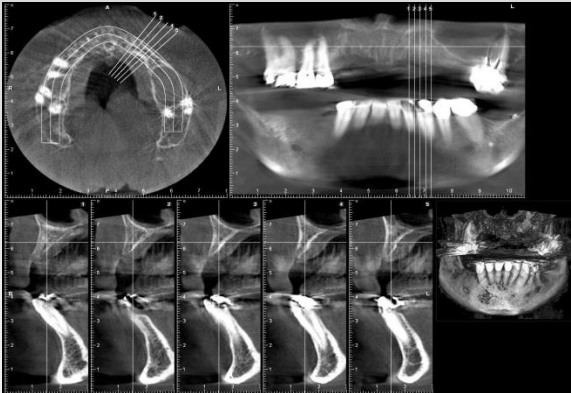
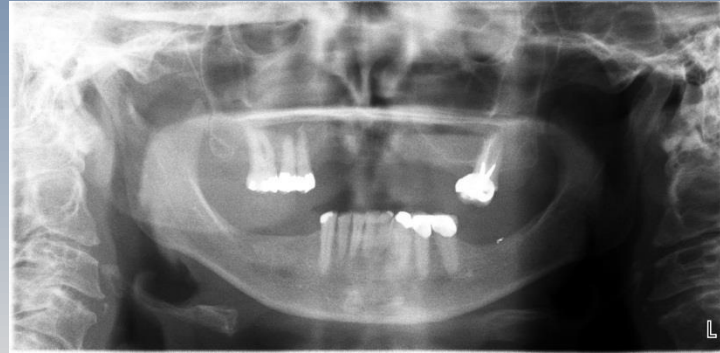


Case Study – Remake Implant Overdenture



Maxillary Implant Supported Denture

Case Study – Maxillary Implant Case



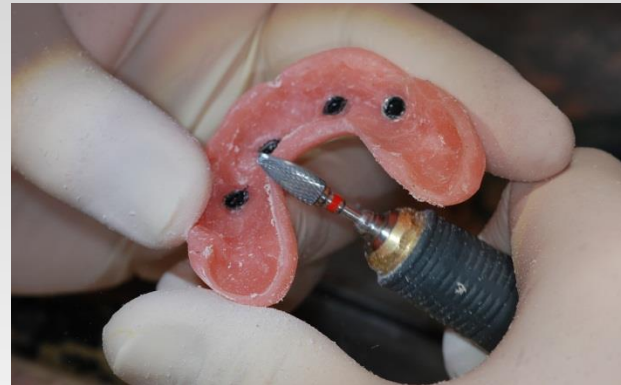
Case Study – Maxillary Implant Case



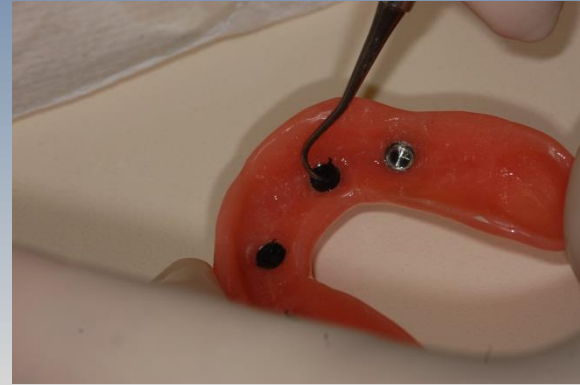
Case Study – Maxillary Implant case



Case Study – Maxillary Implant Case



Case Study – Maxillary Implant Case



Case Study – Maxillary Implant Case



Mandibular Implant Supported Denture

Case Study – Mandibular Implant Case



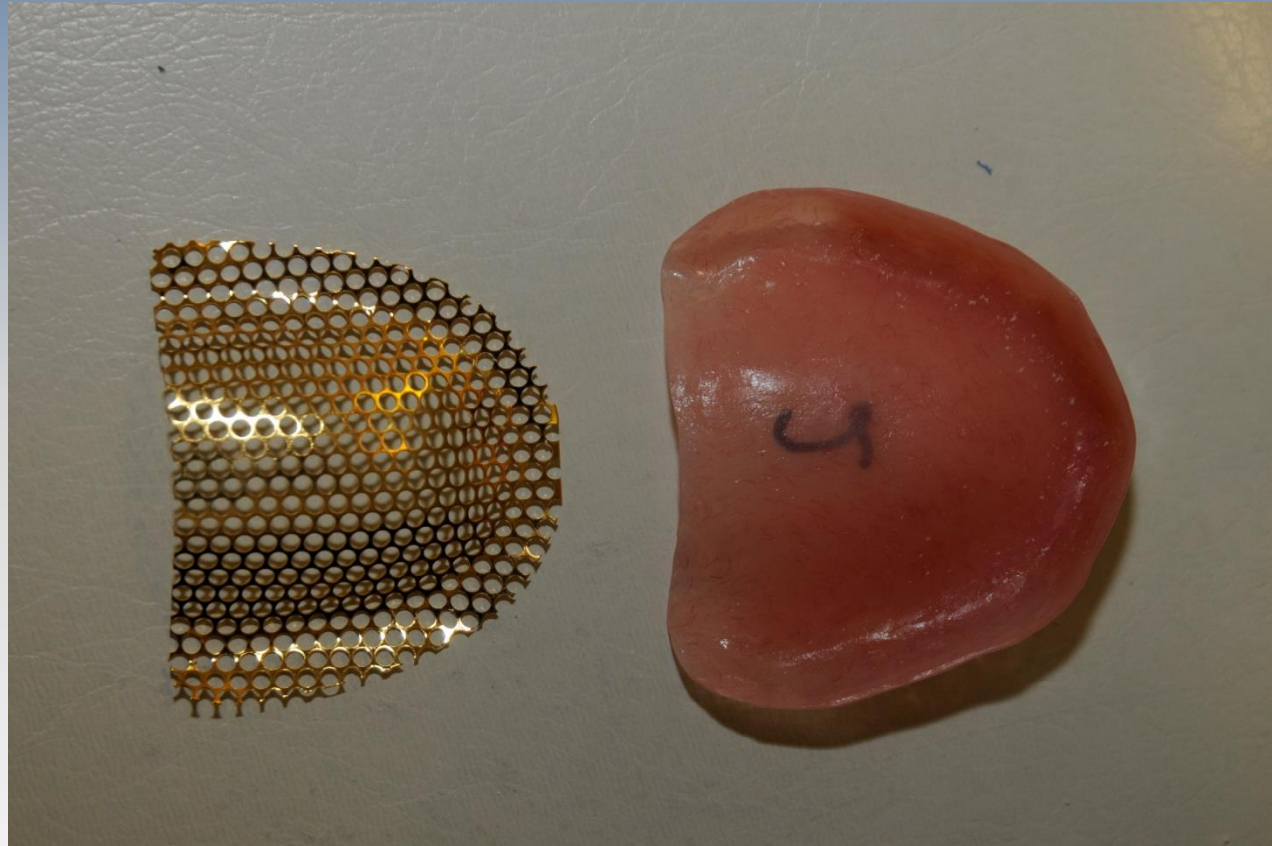
Case Study – Mandibular Implant Case



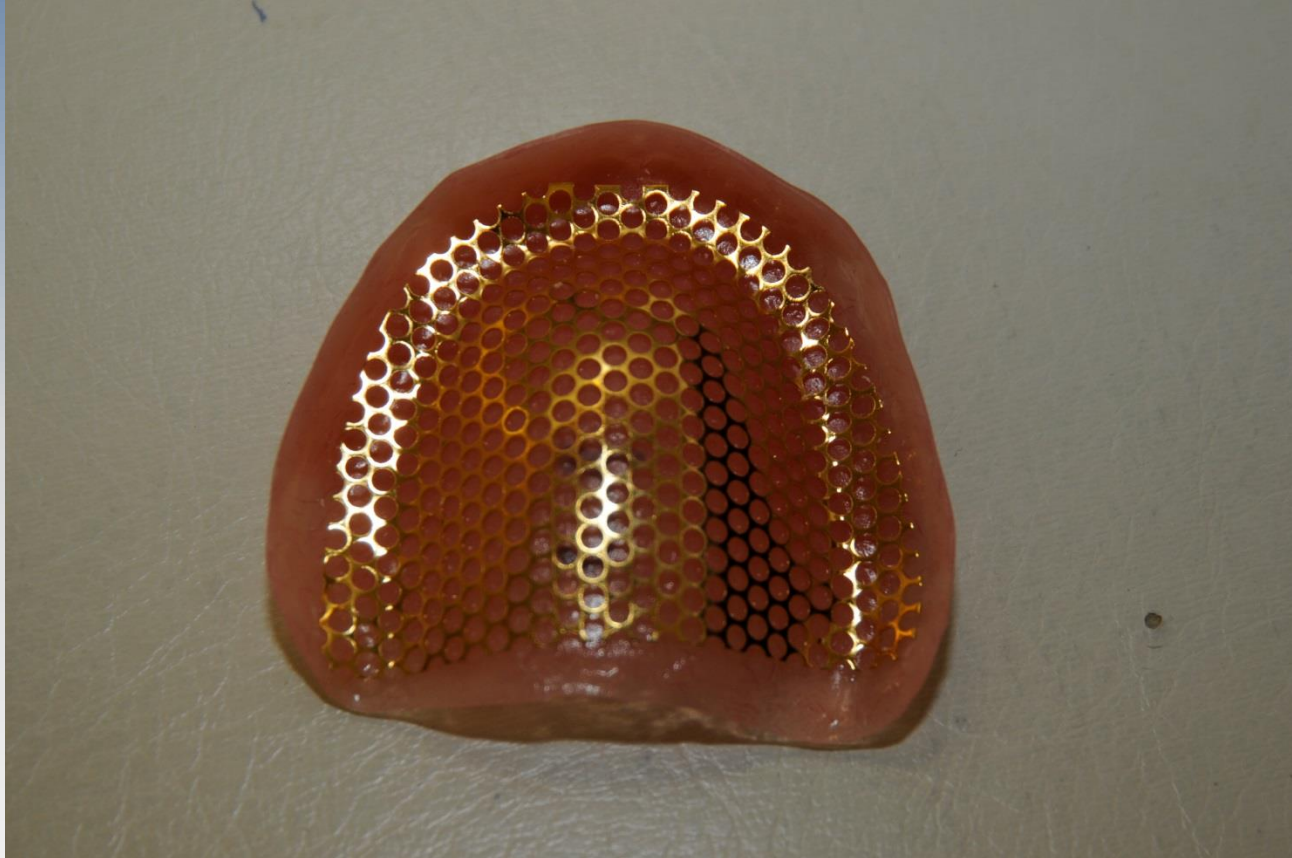
Case Study – Mandibular Implant Case



Maxillary Implant Case-Reinforcement



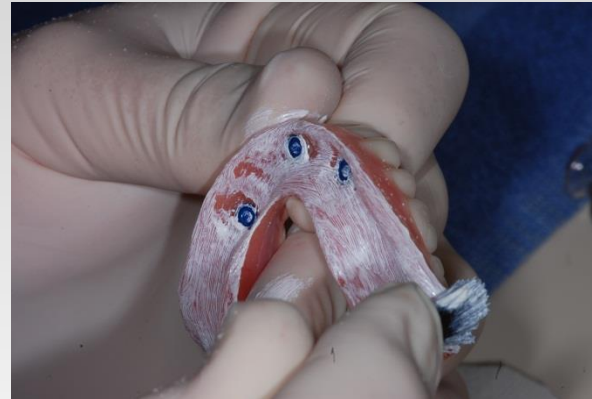
Maxillary Implant Case-Reinforcement



Case Study – Mandibular Implant Case



Case Study – Mandibular Implant Case



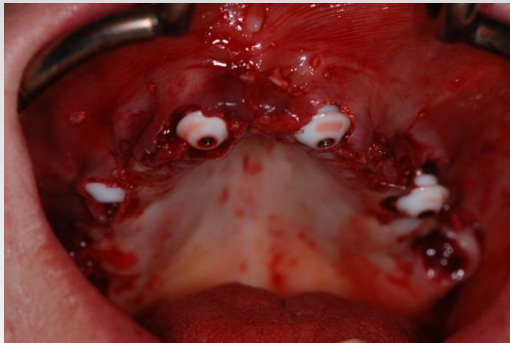
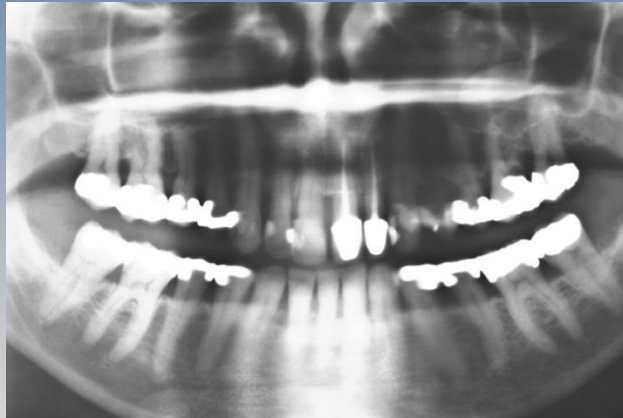
Case Study – Mandibular Implant Case



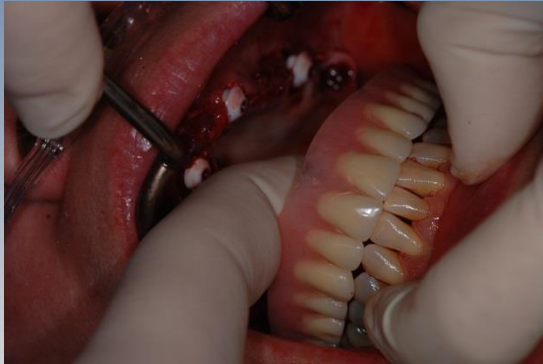
Case Study

All on Four Implant Reconstruction Temporary Denture

Case Study – All on Four Implants



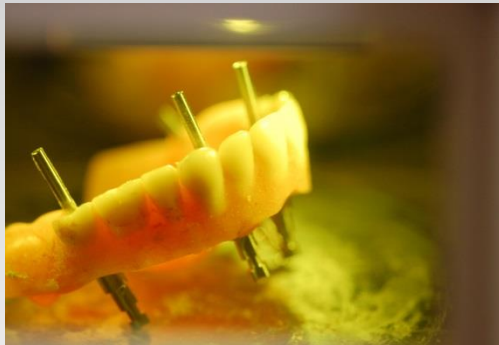
Case Study – All on Four Implants



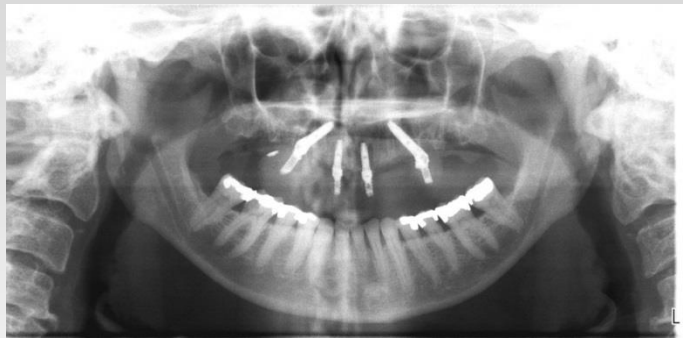
Case Study – All on Four Implants



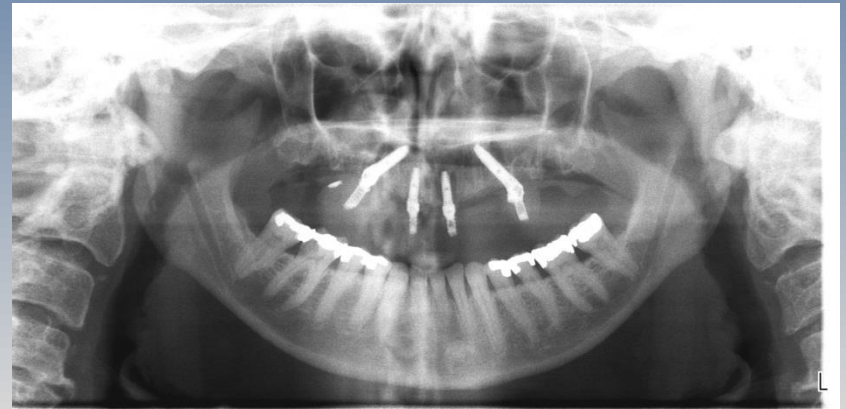
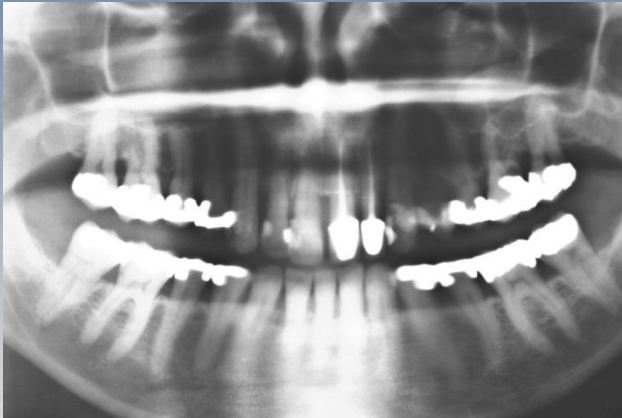
Case Study – All on Four Implants



Case Study – All on Four Implants



Case Study – All on Four Implants



Google: Dentures = 16,200,000

Consumer information on the Internet about Dentures

Complete dentures can range in price from **\$300 to \$8,000**. The difference in cost is related to the fabrication time, cost of dental materials, and the experience of the dentist. **An experienced dentist may take 15 hours and five to six appointments** to complete the process of making complete dentures.

“ Lower dentures never fit or feel like natural teeth. They become loose fitting due to shrinking gum tissue, which then causes irritation to the mouth, sores and pain. Lower dentures also restrict your ability to eat or talk as you had with your natural teeth. **The only relief is in using dental adhesives** to improve the fit.”

Google:

Loose Dentures = 528,000 results

Denture Adhesive Lawyer = 20,600 results

Denture Adhesive Lawsuits = 21,600 results

The Real Economics

One Set of Larell Dentures

- About One hour of chair time
 - Cost of templates and reline material \$ 375.00
 - Suggested fee to patient \$1200.00-1400.00
- Profit: **\$800-1,000/hour**

Grow Your Practice

- Add patients you would not have seen
- Brings in family members and friends
- Promotes your practice as innovative

- Sample increased gross income at \$1200.00/set

Sets per week	hours/week	Additional Gross Income/Yr
1	1.5	\$ 62,400.00
2	3.0	\$124,800.00
3	4.5	\$187,000.00
4	6.0	\$249,000.00

Larell Kit Contents

Initial Kit: for office use

- Ten Larell Denture templates, U/L of each of five sizes
- One Professional package Hard Reline material
- One Professional package Soft Reline material
- One Hot pot
- One Occlusal plane plate
- One bottle tinting liquid
- Placement Instructions

Reorder templates individually



Doctor Testimonials

“This technique has eased my stress levels and increased my production significantly.” Dr R Jackson, New York

“The technique was so easy I thought I did something wrong!”
Dr M Link, Virginia

“I want to thank you for developing this system as it enabled me to actually be a part of changing lives...Thanks again for a wonderful technique and product.” Dr R Lunt, Oregon

“CR Evaluators and scientists found this concept is valuable for many patients who cannot afford custom dentures” Dr Gordon Christensen...Clinicians Report April 2015

The Larell Difference

- Innovative one hour technique
- Intuitive, easy to learn technique
- Addresses major barriers to care
 - Access
 - Cost
- Low adjustment rate
- Profitable for dentist
- Affordable for patient

Contact Information



Dr Lawrence Wallace
Phone 831.659.9300

Larry@larell.com