

**MEET THE DOCTOR:  
KEVIN C LIN, DDS, FACP  
PROSTHODONTIST**

**RECONSTRUCTIVE DENTAL SPECIALIST**

Dr. Kevin Lin is a board-certified specialist in prosthetic dentistry. He has extensive clinical training and experience rehabilitating patients with complex dental problems using composite resin, dental implants, veneers, crowns, bridges, and dentures. He is an expert in creating and maintaining partials and dentures for older adults. Moreover, he has restored thousands of dental implants and related fixed and removable dental appliances.

Dr. Lin has published numerous papers in peer-reviewed journals, written book chapters, and presented in international and national professional conferences and regional study club meetings on issues concerning prosthetic dentistry.

He actively participates in local study clubs to learn and share new clinical knowledge and techniques; he works tirelessly with specialists, general dentists, and lab technicians to provide the best quality patient care possible. He currently serves as an ad-hoc journal reviewer for the Journal of Prosthetic Dentistry and the Journal of Prosthodontics.

*Kevin C. Lin, DDS*



**EDUCATION**

Board Certification, American Board of Prosthodontics Certificate in Prosthodontics, UCSF Postgraduate Prosthodontics  
Doctor of Dental Surgery, UCLA School of Dentistry  
B.S. Biological Sciences in Medical Microbiology & B.A. Psychology, UC Davis

**POST-GRADUATE CREDENTIALS**

Diplomate, American Board of Prosthodontics  
Fellow, American College of Prosthodontists  
Fellow, International Congress of Oral Implantologists  
Ad-hoc Journal Reviewer, Journal of Prosthetic Dentistry and Journal of Prosthodontics  
Former Assistant Professor, University of the Pacific, Arthur A. Dugoni School of Dentistry  
Volunteer Faculty, Pre-doctoral Prosthodontic Clinic, University of California, San Francisco

# RECONSTRUCTIVE DENTISTRY UPDATES

OCT/NOV 2021

*Evidence Based Clinical Practices in Prosthodontics*

## DO YOU HAVE A PATIENT WITH A MOUTHFUL OF FAILING CROWNS/BRIDGES AND LOOSE TEETH?



You find decay at many crown margins, some of the teeth are mobile, there are tartar and plaque everywhere, and the gum bleeds instantly as soon as you try to perio probe. With the remaining teeth in such a poor shape, You are not sure if you could take care of the teeth and manage your clinical time effectively!

**This is a patient who was referred to me for a full mouth reconstruction**

**Here is the story of my patient Mr. Li.**

Like many of my patients, he devoted his time to work and family his whole life, and it wasn't until he was able to take a brief pause to take care of himself that he realized his dental health was in desperate need for help!

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## WHEN SHOULD YOU CONSIDER REFERRING TO A PROSTHODONTIST?

Prosthodontists are specialists in esthetic, implant, and reconstructive dentistry.

### 1. Treatment complexity is beyond your typical practice.

Vertical dimension discrepancies, severely resorbed ridges, limited restorative space, poor implant angulation, TMJ, severe bruxism, traumatic tooth loss, or congenital abnormalities.

### 2. Patient has extensive needs and is draining too much of your chair time!

If your patient requires treatment from multiple specialists, we can help sequence and manage the interdisciplinary treatment plans.

### 3. Patient wants a perfect smile!

If the patient has a gummy smile, thin gum and susceptible to recession, or extremely picky!

### 4. You want to discuss a case with a colleague to ease your mind.

We are an excellent resource for you to ask questions about complex treatments. We can work with you or complete the treatment for you to achieve the best in both function and esthetics for your patients.

## DO YOU WANT TO CHAT ABOUT A COMPLEX PATIENT CASE? OR WOULD YOU LIKE TO MEET AND SHARE IDEAS?

With your reputation for quality dental service and my experience with complex treatments, we can work together and benefit as a team. We simply want to do what is best for the patients.

I would like to work with you on challenging patient cases and share knowledge and experience. I would love to meet you for lunch, over a coffee break, or at your office to discuss a difficult patient case or to share ideas.

Please don't hesitate to reach out to me. I'm looking forward to talking with you on the phone or meeting in person.



- Initial -

Mr. Li was referred to me because the existing teeth were extremely mobile and the long-span bridges on the upper and lower had poor prognosis due to decay and significant attachment loss.

**The case was challenging because:**

- The existing smile line and occlusal plane were not acceptable
- Immediate dentures were difficult to make due to the presence of mobile teeth and severe ridge resorption
- The need to plan implants in strategic positions to provide fixed functional prostheses



POST-SURGERY  
IMMEDIATE DENTURES  
INSERTION



Monolithic zirconia fixed bridges  
Upper: 3 FPDs  
Lower: full arch



**Treatment sequence:**

- Immediate denture impressions capturing anatomical landmarks
- Re-establish occlusal plane, vertical dimension, and anterior-posterior tooth positioning during denture fabrication
- Implant treatment planning based on denture set-up
- Coordination with the implant surgeon for implant placement and ridge contouring
- Fabrication of the fixed implant provisionals and the definitive implant prostheses
- Re-care maintenance



Final front and profile view

**MY TREATMENT SUMMARY FOR MR. LI:**

- ❖ Comprehensive evaluation and immediate denture fabrication
- ❖ Implant and surgical treatment planning
- ❖ Fixed implant provisionals to verify and assess esthetics, phonetics, and function
- ❖ Completion of fixed zirconia implant bridges + regular maintenance re-care visits

**CLINICAL OUTCOMES OF FULL ARCH FIXED IMPLANT-SUPPORTED ZIRCONIA PROSTHESES: A SYSTEMATIC REVIEW**

BIDRA A, ET. AL. EUR J ORAL IMPLANTOL 2017; 10(SUPPL1):35-45

**Aim:** The primary aim of this systematic review was to study the clinical outcomes of one-piece fixed complete dentures (complete arch fixed implant-supported prostheses) made of zirconia for edentulous patients. The secondary aim was to compare the clinical outcomes of monolithic zirconia vs zirconia veneered with porcelain (conventional, minimal or gingival) for fixed complete dentures.

**Materials and methods:** Two investigators conducted an independent electronic search of the literature, using PubMed and Scopus search engines from January 1, 2000, to August 31, 2016. After application of pre-determined inclusion and exclusion criteria, the final list of articles was reviewed to meet the aims of this review.

**Results:** A total of 12 observational studies were identified that satisfied the inclusion criteria of this systematic review. Short-term results from a combined 223 patients with 285 one-piece zirconia fixed complete dentures showed a mean failure rate of 1.4% due to the fracture of four prostheses. Prosthetic complications occurred in 46 prostheses (16.1%). Out of these, 42 prostheses (14.7%) had minor complications exclusive to fracture of veneered porcelain.

**Conclusions:** Current evidence indicates that zirconia fixed complete dentures have a very low failure rate in the short term, but have a substantial rate of minor complications related to chipping of veneered porcelain. Use of monolithic zirconia with only gingival stains, or zirconia that is veneered only at the gingiva may offer promising results, but will need to be validated by future long-term studies.

ADVANTAGES AND DISADVANTAGES OF ZIRCONIA FOR USE IN FIXED COMPLETE DENTURE TREATMENT	Advantages	Disadvantages
	1 Good dental and gingival aesthetics <sup>1,6,8</sup>	Inability to repair framework fractures
	2 Superior strength and rigidity <sup>6</sup>	Difficulty in adjusting and polishing <sup>21</sup>
	3 Excellent wear compatibility <sup>6,8,17</sup>	Heavier than metal-resin or metal-ceramic prostheses.
	4 Fabrication requires CAD/CAM providing superior fit of the prosthesis	Low tolerance for minor inaccuracies in impression and can result in fracture of the prosthesis at the time of insertion.
	5 Reduced laboratory cost due to less laborious nature of fabrication	High rate of chipping/fracture of veneering porcelain <sup>2</sup>
	6 Provision of warranty by dental laboratories and manufacturers against fracture <sup>18-20</sup>	Empirical reporting of occasional clicking sounds in double arch situations may be objectionable to some patients
	7 Digital files can be stored permanently for fabrication of future prosthesis if necessary <sup>9</sup>	Minimal long-term scientific data on clinical outcomes
	8 Can be used in monolithic form with stains or with veneered porcelain (conventional, minimal or gingival)	
	9 Allows fabrication and testing of prototype prosthesis in PMMA for patient approval and for future contingency use <sup>1,6,9</sup>	
	10 Reduced staining compared to acrylic resin	
	11 Good biocompatibility <sup>8</sup>	
12 Reduced plaque accumulation and favourable soft tissue response <sup>8</sup>		

**WOULD YOU LIKE TO STAY UP TO DATE WITH THE MOST CURRENT CLINICAL DENTAL RESEARCH?**

You are not alone for continuing education! You have the opportunity to join like-minded clinicians in the community and challenge yourself to learn in a friendly non-judgmental atmosphere. We would love to have you for study club events, lecture presentations, and treatment planning seminars. For more detail on future events, please contact me.