

Advances In Prosthodontics™

New Findings & Best Practices for Cosmetic & Restorative Dentistry

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Do You Have a Patient With Missing Anterior Teeth?



Here's the story of a patient who was referred from another dental professional...

If you have a patient with several missing, broken or severely worn teeth — or a genetic disorder — they may be a candidate for oral rehabilitation with the assistance of an advanced Prosthodontist.

Read more on the next page...

◆ Do you want another opinion on a complex case? Or to talk and share ideas?

There are many ways we can help each other by working together on complex cases and by sharing knowledge and experience.

If you'd like to discuss a treatment, or talk on the phone about how we can help each other, please call or email our office with specific days and times when you're available.

More Examples

Stay informed on new findings and best practices for cosmetic and restorative dentistry.

See more examples of complex cases online at:

AdvancedProsthodontist.com
/ PleasantonPros

Replacing Missing Teeth Using the Maryland Bridge

by the Specialists of *Pleasanton Prosthodontics* — Dr. Maggie Chao & Dr. Olivia Nguyen

Patient “Kim” was 12 when she was referred by her orthodontist.

She has Cleft Lip and Palate, with congenitally missing teeth #'s 7, 8, 9.

As prosthodontists, we have experience with complex treatments and can coordinate with a patient’s general dentist and other dental specialists.

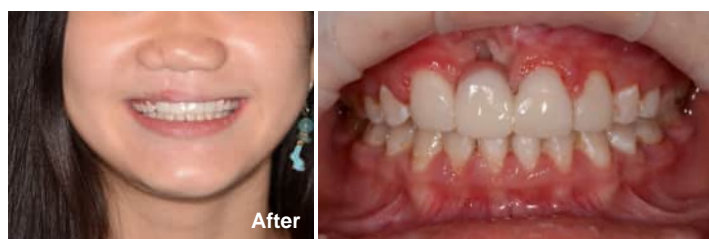
The orthodontist had carefully planned to move tooth #10 into the position of #9 and utilize the canines as lateral incisors so the patient would only need replacement of a single tooth #8.

For Kim, we combined the techniques of a Pekkton Maryland Bridge with the Bioclear protocol (see the 3 steps on page 4) to transform her smile. The Maryland Bridge supported the Pontic which is bordered with pink composite and all teeth were formed using monolithic injection molded composite.

There is an interesting story behind the name Maryland Bridges. It is not named after the state of Maryland, nor was it really invented anywhere in the state of Maryland. Even though evidence shows that this technique has been used by dentists in the late 19th century (see the journal article on next page). The “modern version” of Maryland Bridges was most likely invented by Dr. Stewart R Halbauer, an Ohio dentist. Later the University of Maryland popularized the technique, and so it came to be known as the Maryland Bridge. (Source: www.dental-treatment-guide.com/dental-bridges/maryland-bridges)

Note about Material Selection: Traditionally, Maryland Bridges have been made of either cast metal or porcelain. Recently, we have another option: Pekkton®. Pekkton® ivory is a high-performance material (based on PEKK), composed of OXPEKK® IG1 (Implantable Grade with highest purity), and Titanium Dioxide for optimization of tint and mechanical properties. It can be used in a variety of ways and veneered with composite, bonded pressed ceramics, or acrylic. (Source: www.cmsa.ch). And the newest option is Bioclear!

See page 4 for the latest material we use to replace missing teeth using Bioclear!



We give all referred patients a warranty and refer them back to the general dentist for regular hygiene unless advised otherwise by the referring office, depending on the patient and treatment. If you have questions about our prosthodontic protocols, please email us at: office@PleasantonPros.com

◆ Do you have a patient in Kim’s Situation? Or another complex case?

If you have a question about a case and want another opinion, give our office a call. Or, if there’s a case that you want to work together on, please fill out and send in the enclosed referral form.

We will take great care of your patient and keep you informed. Dental professionals refer to us as **The Complex Case Specialists™** because we perform complex cases every day.

Quickly Get the Latest Research On Procedures & Materials For Better Outcomes...

The Origin of the Maryland Bridge

James L. Gutmann; J Hist Dent. Fall 2019;67(2):110

The dental world was introduced to a revolutionary and esthetically pleasing adhesive-retained fixed partial denture for the replacement of anterior missing teeth in the early 1980s.^{1,2}

Patient comfort was enhanced along with minimal pulpal trauma to adjacent teeth that may occur with the extensive cutting of tooth structure with the use of full coverage crowns.

Proffered by faculty from the University of Maryland, this tooth replacement was ultimately known as the Maryland Bridge, and it has been used extensively to the benefit of many patients. However, as with anything in history, especially the history of dentistry, the evolution of these types of improvements often comes from information buried in the vaults of the numerous dental publications that arose in the 1700-1800s, vaults that are only too often never opened to the riches within.

So it was also with this prosthetic replacement as significant evidence exists in 1887 that this prosthesis was used routinely by restorative dentists.³ Dr. Allison R. Lawshee from Trenton, NJ, USA provided the dental world with this replacement prosthesis almost 100 years prior to the what we know today at the Maryland Bridge. While not possessing the properties of contemporary etching and adhesion, minimal tooth damage was highlighted and sound principles of cementation were advocated. Historical evidence and enlightenment for today's generation at its finest.



Maryland bridge treatment with Pekkton framework by **Maggie Chao, DMD of Pleasanton Prosthodontics** (illustrations only, not part of this article)

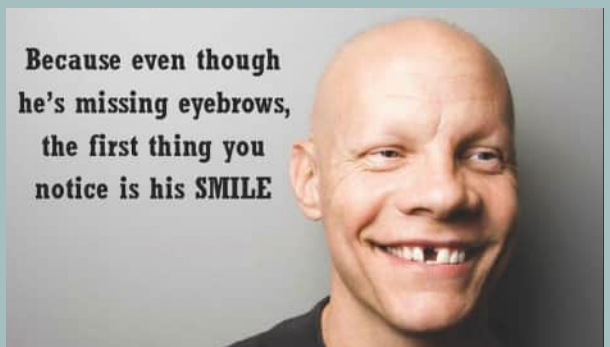
References:

1. Livaditis GJ, Thompson VP. **The Maryland bridge technique.** TIC 1982;41(11):7-10.
2. Livaditis GJ. **Etched metal resin-bonded restorations: principles in retainer design.** Int J Periodontic Restorative Dent 1983;3(4):34-47.
3. Lawshe AR. **A system of removable bridge substitution, using sound teeth, cavities and roots as abutments.** Dent Items Int 1887;19:661-667.

◆ Have a Laugh: Why Is Dentistry Important?

We hope we made you smile during your busy day! We take the care of patients referred to us very seriously, including knowing how to educate them so they feel comfortable. We specialize in the treatment of complex cases, usually involving several procedures over months of care.

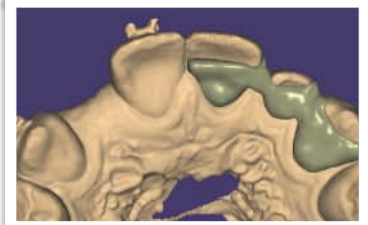
The next time you see a challenging case, please feel free to call us and we can discuss treatment planning or we can help you with any part of the treatment. Our goal is to be a resource for your office by helping manage difficult and time-consuming procedures, restoring the function and esthetics that the patient desires, then referring them back to your office for their ongoing care.



Bonded Maryland Bridge

Is your patient too young for implants?

Often, we have to wait until a patient stops growing before they can get implants. Maryland Bridges can fill that gap... literally! And when that patient is old enough, we can remove these non-invasive restorations to have dental implants placed. In the case example (shown to right), we even saved the baby tooth to preserve bone for a future implant!



Step 1: Records

As your patient finishes orthodontics, we will see them to close any open spaces and idealize their smile! During their consultation we will take records.

Step 2: Design

We design the framework and our ceramist will make the bridge — all before the patient's braces or Invisalign is finished!

Step 3: Delivery

Then on the SAME day as the patient's braces come off, we bond the bridge in place and retainers can be made!



DID YOU KNOW?

The lateral incisors are the most common congenitally missing or underdeveloped teeth! There can be significant variation in the size and shape of lateral incisors between different individuals that can leave unwanted spaces after orthodontics!

Before



After



Bioclear Bonded Maryland Bridges

Dr. Maggie Chao and Dr. Olivia Nguyen at **Pleasanton Prosthodontics** are experts in Bioclear and would love to consult with you on whether Bioclear restorations are right for you!

◆ How can a Prosthodontist assist you and your dental team?

We specialize in the treatment of complex cases, usually involving several procedures over months of care. The next time you see a challenging case, please feel free to call us and we can discuss treatment planning or help you with any part of the treatment.