

# Advances In Prosthodontics™

New Findings & Best Practices for Cosmetic & Restorative Dentistry

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## Do You Have a Patient Who Experienced a Traumatic Injury to Anterior Teeth?

Before



After



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 — from traumatic injury or neglect — 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. With your reputation for quality dental care, and my experience with restorative treatments, we can work together on advanced cases and both benefit! If you'd like to discuss a treatment, or talk on the phone about how we can help each other, please call or email my office with specific days and times when you're available.

### Prosthodontic Publication

#### Want to see recent issues?

Stay informed on new findings and best practices for cosmetic and restorative dentistry. See more examples of complex cases online at:

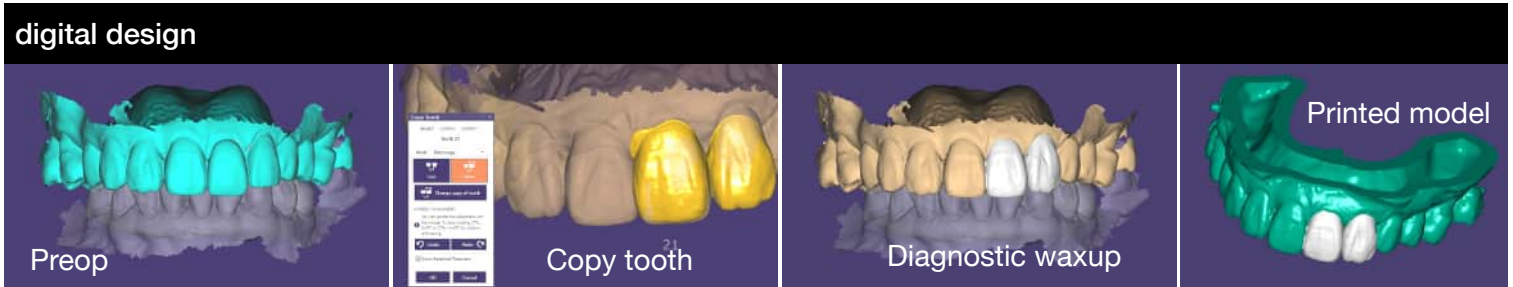
**AdvancedProsthodontist.com / Chao**

# CASE SUMMARY: My Favorite Software trick: Mirroring

by Dr. Maggie Chao, Prosthodontist

Patient “Jessica” was referred to me by another dental professional in the area due to her complex needs. She had a challenging esthetic situation. Jessica hated her smile. Suffering trauma as a teenager, her front teeth #9, 11 were fractured and #10 was extracted. Tooth #11 was substituted as a lateral incisor leaving her with a significant asymmetry.

The affected teeth were root canal treated with the darkened roots and PFM margins now showing in her smile line. We discussed all possible treatment options.

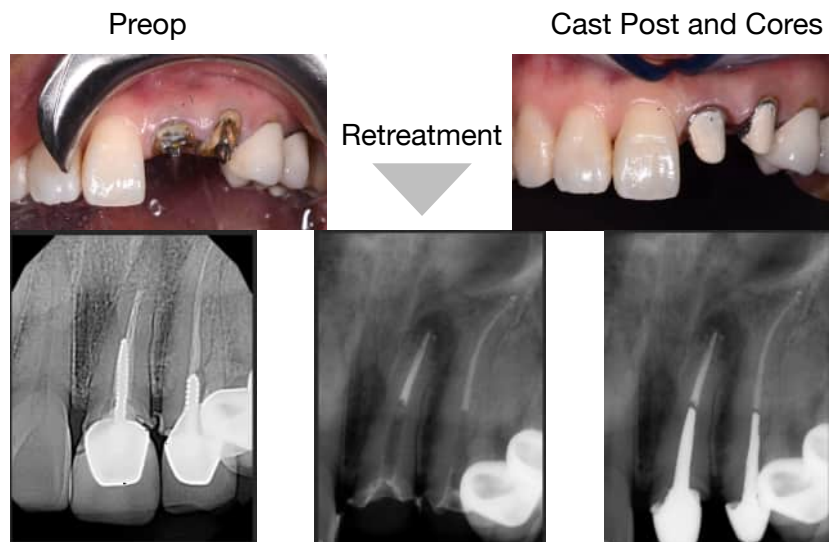


Jessica saw an endodontist, orthodontist, and periodontist — and she opted to save her existing roots by having them retreated with new posts. She declined ortho, extractions, and dental implant therapy.

When planning for her new restorations, I wanted to not just match the color but also the texture of her natural enamel. The most predictable way to do this is by mirror-imaging the contralateral tooth. Presto magic!

We then 3D print a model and make a conventional vacuform to fabricate the provisional. The lab ceramist gets this model to plan their restoration.

You can see the final result on [page 1](#).



I gave Jessica my full warranty when I sent her back to the referring office for regular hygiene visits, noting that she come to our office for an annual exam and maintenance. I 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 my prosthodontic protocols, please email me: [drchao@pleasantonpros.com](mailto:drchao@pleasantonpros.com)

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

If you have a question about a case and want another opinion, give my 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.

My office and I will take great care of your patient and keep you informed. Dental professionals refer to me as **The Complex Case Specialist™** because I perform complex cases every day.

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

## Endodontic retreatment vs dental implants of teeth with an uncertain endodontic prognosis: 1-year results from a randomised controlled trial

Esposito M, Tallarico M, Trullenque-Eriksson A, Gianserra R. Eur J Oral Implantol. 2017;10(3):293-308

### Purpose

To ascertain whether in the presence of a previously endodontically treated tooth with a periapical pathology and/or symptoms and an uncertain prognosis, it is better to endodontically retreat it or to replace the tooth with a single implant-supported crown.

### Materials and Methods

Forty patients requiring the treatment of a previously endodontically treated tooth, with a periapical pathology and/or symptoms of endodontic origin and an uncertain prognosis, as judged by the recruiting investigators, were randomly allocated to endodontic retreatment (endo group; 20 patients) or tooth extraction and replacement with an implant-supported crown (implant group; 20 patients) according to a parallel group design at two different centres. Patients were followed to 1 year after completion of the treatment. Outcome measures were: failure of the procedure, complications, marginal bone level changes at both teeth and implants, endodontic radiographic success (teeth only), number of patients' visits and days to complete the treatment, patients' chair time, costs, aesthetics assessed using the pink esthetic score (PES) for the soft tissues and the white esthetic score (WES) for the tooth/crown recorded by independent assessors.

### Results

No patient dropped out and no complications occurred during the entire follow-up; however, one endodontically retreated tooth (5%) and one implant (5%) fractured, the difference for treatment failures being not statistically significant (difference in proportions = 0; 95% CI -0.14 to 0.14; P Fisher's exact test) = 1.000). The mean marginal bone levels at endo retreatment/implant insertion were  $2.34 \pm 0.88$  mm for the endo and  $0.23 \pm 0.35$  mm for the implant group, which was statistically significantly different (mean difference = 2.11 mm; 95% CI: 1.68 to 2.55; P (t-test) < 0.001). One year after completion of the treatment, teeth lost on average  $0.32 \pm 0.53$  mm and implants  $0.48 \pm 0.72$ , the difference not being statistically significant (mean difference = -0.16 mm; 95% CI: -0.58 to 0.27; P (t-test) = 0.457). One year after completion of the endodontic retreatment, of the 13 teeth that originally had a periapical radiolucency, one was lost, six showed complete healing; four a radiographic improvement; and two showed no changes/worsening. Two of the teeth originally without a lesion developed a lesion. There were no statistically significant differences for the number of patients' visits (endo =  $5.2 \pm 1.8$ ; implant =  $5.5 \pm 1.1$ ; mean difference = -0.03 95% CI: -1.24 to 0.64; P (t-test) = 0.522). It took significantly more days to complete the implant rehabilitation (endo =  $48.9 \pm 19.5$ ; implant =  $158.5 \pm 67.2$ ; mean difference = -109.60; 95% CI: -141.26 to -77.94; P (t-test) < 0.001), but less patients' chair time (endo =  $405.5 \pm 230.3$  min; implant =  $260.0 \pm 154.6$  min; mean difference = 45.50; 95% CI: 19.35 to 271.65; P (t-test) = 0.025). Implant treatment was significantly more expensive (endo =  $1195 \pm 503.7$  €; implant =  $1907.5 \pm 232.4$  €; mean difference = -712.50; 95% CI: -963.59 to -461.41; P (t-test) < 0.001). One year after treatment completion, the mean PES was  $10.92 \pm 1.93$  and  $7.07 \pm 2.87$  and the mean WES was  $7.67 \pm 1.83$  and  $7.60 \pm 2.32$  in the endo group and implant group, respectively. Soft tissues aesthetics (PES) was significantly better at endodontically retreated teeth (mean difference 3.85; 95% CI 1.94 to 5.76; P (t-test) < 0.001) whereas no significant differences were observed for tooth aesthetics (WES) (mean difference 0.07; 95% CI -1.62 to 1.76; P (t-test) = 0.936) between treatments.

### Conclusions

The preliminary results suggest that both endodontic retreatment and replacement of previously endodontically treated teeth with persisting pathology and a dubious endodontic prognosis provided similar short-term success rates. Aesthetics of the soft tissues and time needed to complete treatment were in favour of endodontic retreatment, whereas implant rehabilitation required half of the chair time than endodontic retreatment, but was significantly more expensive. Although much larger patient populations and longer follow-ups are needed to fully answer this question, in this scenario the less invasive endodontic retreatment could be the first therapeutic option to be considered.

### ◆ Have A Laugh: You know you're a dentist when...you use the same shade of gingiva for your nail polish!

I hope I made you smile during your busy day! I take the care of patients referred to me very seriously, including knowing how to educate them so they feel comfortable.

It's my goal to help every patient understand even the most difficult procedures, so they can regain the function and esthetics they desire.



# Dr. Maggie T. Chao

DMD, Prosthodontist ♦ The Complex Case Specialist™



*Dr. Maggie Chao works with dental professionals near the Pleasanton and Walnut Creek areas to restore the smiles and confidence of patients facing a difficult diagnosis.*

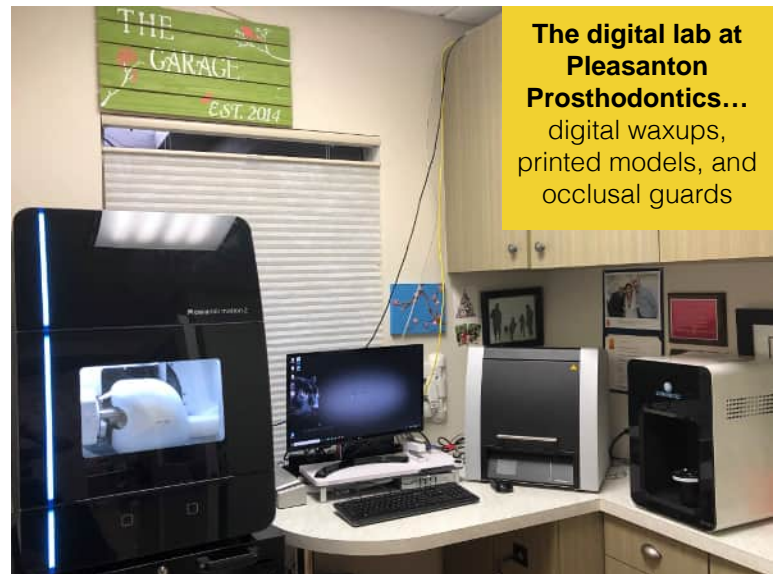
## About Pleasanton Prosthodontics:

Pleasanton Prosthodontics is a specialty practice limited to fixed and removable prostheses, dental implants, and all phases of esthetic dentistry. Dr. Chao's extensive prosthodontic training and private practice experience make treatments of complex cases more successful, including the following examples: Patients with ill-fitting dentures, severely worn or damaged teeth can receive a single dental implant or a full arch of natural-looking teeth.... Patients who have suffered from traumatic injury, congenitally missing teeth, or a chronic condition can receive oral prostheses, which may be a combination of dental implants, crowns, bridges, or veneers.... Patients with severe neglect of their oral health can receive a full reconstruction to restore function & esthetics.

[PleasantonPros.com/doctor-referral](http://PleasantonPros.com/doctor-referral)

There are 2 ways to use this section of Dr. Chao's website to make treatment communication easier, help patients, and do less administrative work:

- 1) **Online Referral Form** is fast and secure, and
- 2) **Collaborator** that allows sharing of documents, radiographs, CT scans, and messages... organized and available to all colleagues working on a case... also HIPAA compliant with no software to install - simply create a password and log on anytime you want to view / update info. It's free to use!



## ◆ Why other dental professionals work with a Certified Prosthodontist

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

1. **You have a patient requiring treatment outside your typical scope of practice.**  
Examples include patients with vertical dimension discrepancies, severely resorbed ridges, inadequate interarch space, severe bruxism, traumatic tooth loss, or congenital abnormalities.
2. **You have a patient with complex needs that may drain your time.**  
If your patient may require treatment from several specialists, Prosthodontists can help because they are trained to appropriately stage and manage complex treatment plans.
3. **You have a demanding patient who wants perfect esthetics.**  
Examples include patients with a high smile line or needing a single tooth replacement in the esthetic zone. A Prosthodontist is trained in selecting the best solutions for high-demand patients.
4. **You have a question and want to discuss a case with a colleague to ease your mind.**  
A Prosthodontist can be an excellent resource for you to ask questions because they are trained in many types of complicated treatments. For example, you may want to consult or refer to a Prosthodontist for complex implant-supported restorations. A Prosthodontist can work with you or complete the treatment for you to achieve the best in both function and esthetics.