

Advances In Prosthodontics™

New Findings & Best Practices for Cosmetic & Restorative Dentistry

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Do You Have a Patient with Bone Loss around Implants?



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 failing restorations — 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

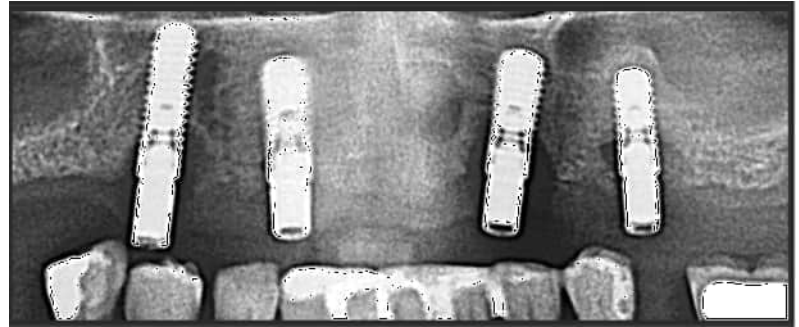


CASE SUMMARY:

10 year old implant and tissue supported Overdenture or Implant retained denture using locator attachments

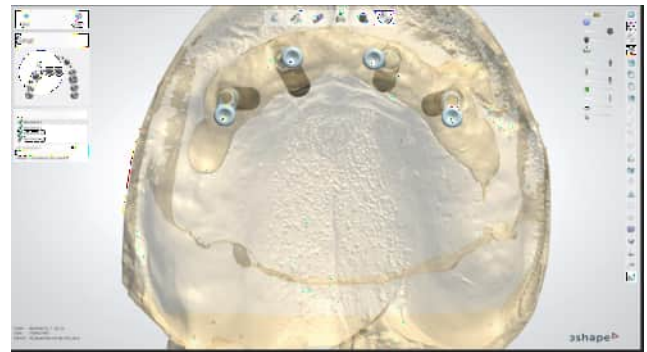
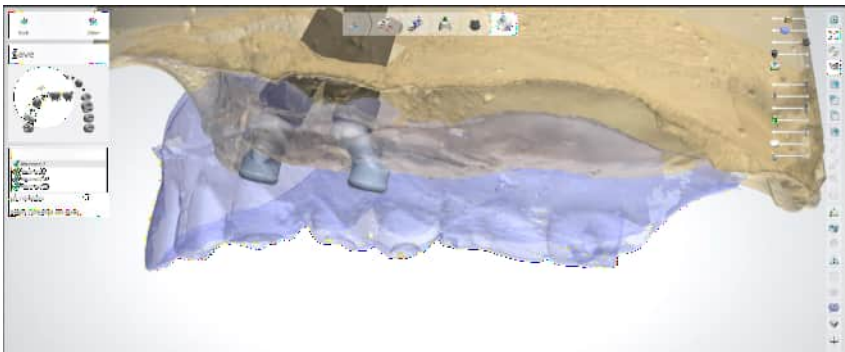
by Dr. Maggie Chao, Prosthodontist

As you can see from the Before photo on page 1, and the radiograph to the right... traditional locators are straight and follow the bony architecture. This leads to divergent implants which makes finding a single path of insertion nearly impossible.



Implant attachment companies have compensated for this divergence by altering the male housings and removing part of the retentive elements so the prostheses can fit. Even so, this patient example is a testament that divergent, non-passive fitting dentures may contribute to bone loss.

Now, with CAD-CAM design and manufacturing, custom abutments can be designed to create a parallelism between abutments and increase retentiveness and minimize wear and tear on implant parts. Design images below, and the After photo on page 1 for this patient.

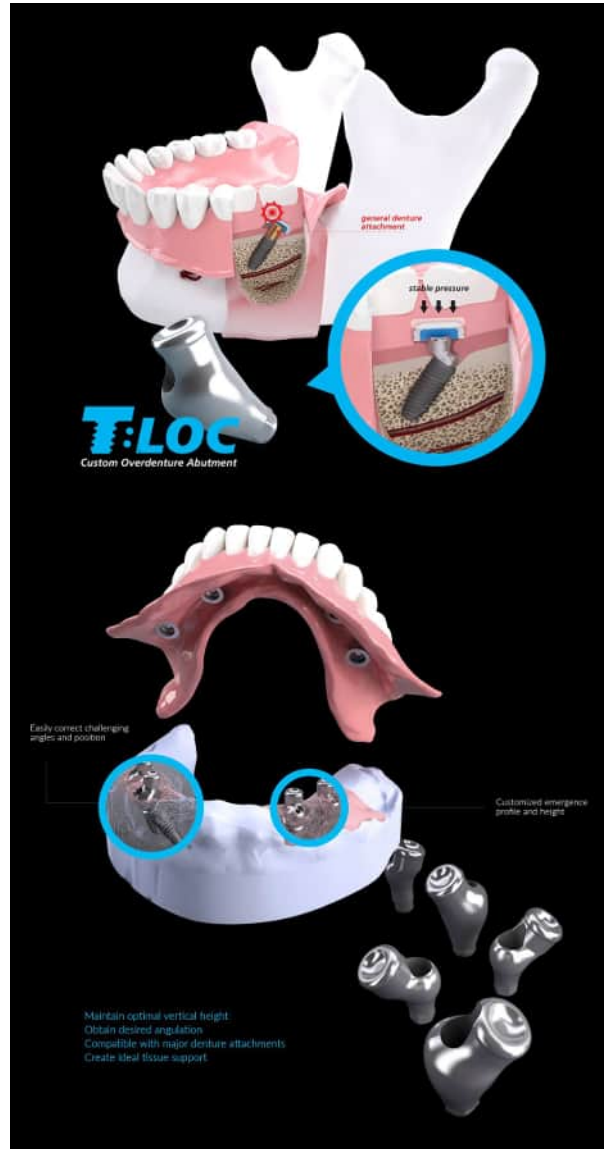
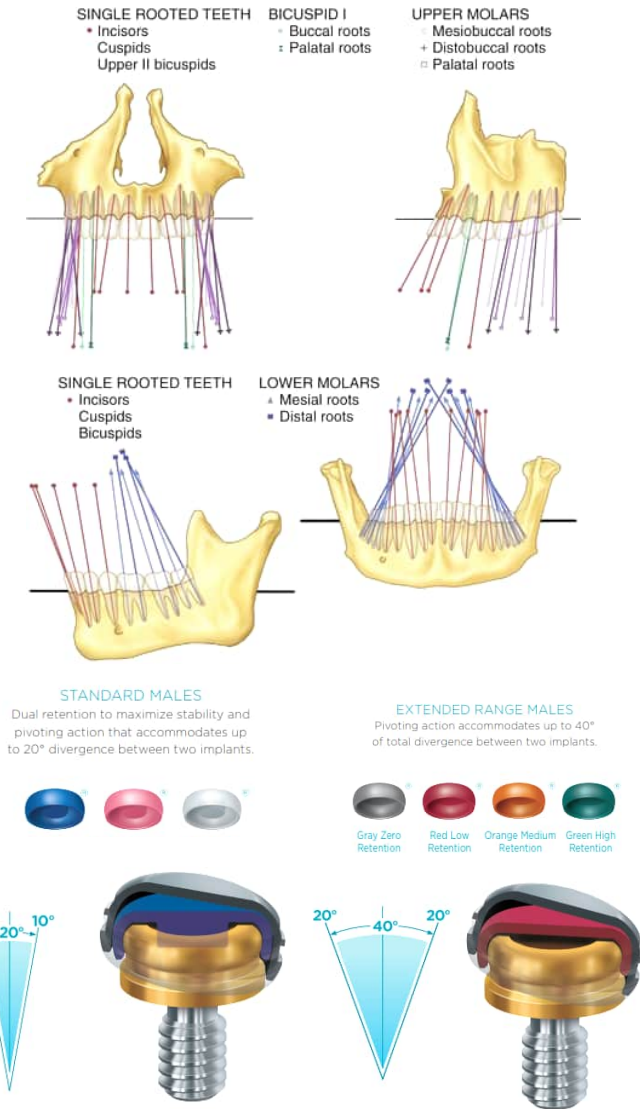


More information on the next page about the abutments I used...

◆ **Do you have a patient in this 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.



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

◆ **Have A Laugh:** Denture-Inspired Phone Cover...

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.



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

Effects of overdenture attachment systems with different working principles on stress transmission: A three-dimensional finite element study

Nurullah Turker, Ulviye Sebnem Buyukkaplan
J Adv Prosthodont. 2020 Dec;12(6):351-360. doi: 10.4047/jap.2020.12.6.351.

Purpose

The aim of the present study was to compare the stress distributions on the dental implants, abutments, and bone caused by different overdenture attachment types under functional chewing forces.

Material and Methods

The 3D finite element models of the mandible, dental implants, attachment types, and prostheses were prepared. In accordance with a conventional dental implant supported overdenture design, the dental implants were positioned at the bone level in the canine teeth region bilaterally. A total of eight models using eight different attachment systems were used in this study. All the models were loaded to simulate chewing forces generated during the centric relationship (450 N), lateral movement (400 N), protrusive movement (400 N), and also in the presence of a food mass unilaterally (200 N). Stress outputs were obtained as the maximum principal stress and the equivalent von-Mises stress.

Results

In all attachment types, higher stress values were observed in the abutments, dental implants, and bone in the magnet attachments in different loading conditions. The highest stress values were observed among the magnet systems in the components of the Titanmagnetics model in all loading conditions (stresses were 15.4, 17.7, and 33.1 MPa on abutment, dental implant, and bone, respectively). The lowest stress value was observed in the models of Zest and O-Ring attachments.

Conclusion

The results of the present study implied that attachment types permitting rotation and tolerating various angles created lower stresses on the bone, dental implants, and abutments.

◆ Why other dental professionals work with a Prosthodontist

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

1. You have a patient requiring treatment outside your typical scope of practice.
2. You have a patient with complex needs that may drain your time.
3. You have a demanding patient who wants perfect esthetics.
4. You have a question and want to discuss a case to ease your mind.

Protho Pledge

When your patient is referred:

- ✓ I will only treat what's been referred.
- ✓ I will send you updates.
- ✓ I will be part of your team, not take over your patients.