

# Advances In Prosthodontics™

New Findings & Best Practices for Cosmetic & Restorative Dentistry

## INSIDE THIS ISSUE

### CASE SUMMARY:

Oral Rehabilitation of Atrophic Maxilla using Zygomatic Implants

Background, Treatment, and Final Result  
**page 2**

### DENTAL JOURNAL BRIEF:

The Evolution of Zygomatic Implants (from the 1990s to 2024)  
**page 3**

### COMPLEX CASES:

Dr. Chao & Dr. Nguyen Both Have Specialized Training & Skill To Make These Treatments More Successful  
**page 4**

© Sams Media Group, LLC

## Do You Have Patients with Failing Dentition or Restorations?



**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.

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:



**AdvancedProsthodontist.com**  
**/ RenuPros**

## CASE SUMMARY

### Oral Rehabilitation of Atrophic Maxilla using Zygomatic Implants

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

Patient “Jane” was referred to us due to her complex needs. Jane had severely atrophic maxilla and Classic Combination Syndrome. About 10 years ago, she lost her maxillary teeth after a traumatic car accident. She was wearing dentures but recently had dental implants placed for a maxillary overdenture. When we met her, one implant had already failed, another one was stuck in her denture! (see image on right...) She had been going through various surgical treatments for 1.5 years with little success.

**As prosthodontists**, we have experience with complex cases, and can plan multi-stage treatments that coordinate with a patient’s general dentist and other dental specialists. Our diagnosis was for immediate extractions, implant placement, and immediate load of both maxilla and mandible in order to correct her occlusal plane and restore functional occlusion. After explaining the treatment plan, Jane decided to move forward. Her treatment plan included working with us to manage the case and an oral surgeon to place her new teeth. The total treatment time was 9 months, but her teeth were fixed the same day as surgery.

Jane enjoyed having fixed teeth for the first time in over 10 years and told our office, “I wish I had done this sooner. I suffered for so many years and my dentist tried hard but didn’t seem to know how to handle my situation. I just love my smile. Now, if only my medical insurance would pay for it!” 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.



Before

After



**With 2 prosthodontists** in the same specialty practice, we have increased capacity to work with you on challenging treatments, so your patients don't have to wait weeks to get a plan for comprehensive care and/or to address reconstructive emergencies. In addition, we have digital workflows that reduce the number of appointments even for comprehensive treatment, while still maximizing function and esthetic outcomes, so your patients can receive restorative care in fewer appointments. If you have questions about our prosthodontic protocols, please call us at: **(925) 425-7545**

#### ◆ Do you have a patient in Jane’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 see the enclosed referral info sheet to learn more about what you and your patient can expect when referring to our specialty office. 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.

## The Evolution of Zygomatic Implants (from the 1990s to 2024)

zagacenters.com/zaga-straumann-zygomatic-implants

Zygomatic implants have come a long way since Brånemark’s original intra-sinus technique. Early approaches provided life-changing solutions for patients with severe maxillary atrophy but were often associated with sinus complications.

Over the past decade, refinements such as the extra-sinus approach and the **ZAGA (Zygoma Anatomy-Guided Approach) classification** have shifted treatment toward anatomy-based planning. By tailoring implant trajectory to each patient’s sinus and alveolar morphology, clinicians can achieve more favorable prosthetic emergence and reduce complications.

More recently, implant designs (e.g., ZAGA-Round and ZAGA-Flat) and success criteria like **ORIS** (Offset, Rhino-sinus health, Inflammation, Stability) reflect a move beyond simple survival rates to true long-term function and comfort. With consensus guidelines published in 2023, zygomatic implant therapy is now more standardized, predictable, and prosthetically driven than ever before.

System / Concept	Categories	Key Features	Clinical Use / Updates
<b>Brånemark Original (1990s)</b>	Intrasinus	Implant fully through sinus, lateral window approach	Still historical reference; higher sinus complications
<b>Extra-sinus Technique</b>	Extra-sinus	Implant bypasses sinus, anchored along zygomatic buttress	Better prosthetic emergence; lower sinus issues but more soft tissue risk
<b>ZAGA Classification (Zygoma Anatomy-Guided Approach)</b>	ZAGA-0 → ZAGA-4	Based on sinus wall concavity & alveolar crest anatomy: • ZAGA-0 = flat wall, intra-sinus • ZAGA-1 = mild concavity • ZAGA-2 = moderate concavity • ZAGA-3 = marked concavity • ZAGA-4 = fully extramaxillary path	Widely used now; CBCT-based planning; standardizes pathway selection; linked to implant designs (ZAGA-Round vs ZAGA-Flat)
<b>AGA (Anatomy-Guided Approach)</b>	Similar to ZAGA	Individualized trajectory tailored to anatomy (not a rigid type)	Often used interchangeably with ZAGA; emphasizes flexibility
<b>ORIS Success Criteria (2018 → refined)</b>	O = Offset (prosthetic emergence) R = Rhino-sinus status I = Inflammation (soft tissue) S = Stability (implant/prosthesis)	Shifts focus from survival → functional & biological success	Increasing adoption in last 5 years, especially in consensus statements
<b>ITI Consensus (2023)</b>	Indications, protocols, outcomes	Formal consensus on: • Case selection (atrophy, failed grafts) • Immediate vs delayed loading • Sinus complication prevalence (~14%) • Survival ~96% at 6.3 yrs	Provides standardized evidence-based guidelines; encourages use of ZAGA/AGA + ORIS
<b>Design Variants (2020–2024)</b>	ZAGA-Round vs ZAGA-Flat implants	Geometry adapted to sinus wall morphology (flat vs concave)	Improves fit to anatomy; promising mid-term results in reducing sinusitis / soft tissue complications

### ◆ 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. 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.

## ABOUT OUR SPECIALTY PRACTICE



**Dr. Maggie Chao and Dr. Olivia Nguyen** are specialists in prosthodontics and available to help you and your patients with complex cases.

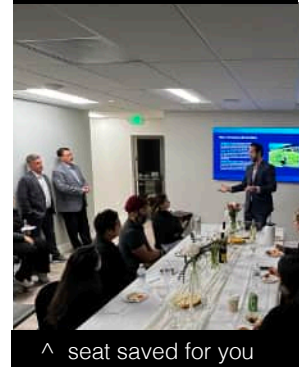
Renu Prosthodontics is a comprehensive, specialty practice that focuses on the restoration and replacement of missing teeth with natural-looking, well-fitted, comfortable prosthetic teeth. The Renu Prosthodontics team has training and private practice experience that make treatments of complex cases more successful, including the following examples:

- Patients with severely worn/damaged teeth, missing all teeth, or with ill-fitting dentures can receive a full arch of natural-looking teeth to restore function & esthetics.
- Patients with congenital defects, a chronic condition, or traumatic injury can receive oral prostheses, which may be a combination of dental implants, crowns, bridges, or veneers.
- Patients with difficult anterior cases in the esthetic zone can receive single or multiple dental implants to replace missing teeth, or veneers or crowns to improve the appearance of their smile.

In addition, Renu Prosthodontics is equipped with an **in-house dental lab**, for your referred patients to receive custom restorations from the best materials using the latest technology. **RENU mission:** Restore smiles, Enhance lives, Nurture trust, and Unite communities through exceptional prosthodontic care!

### New Lecture Space

Training events with colleagues!



^ seat saved for you

### Our Pledge

#### When your patient is referred:

- ✓ We will only treat what your patient needs.
- ✓ We will send you updates.
- ✓ We will be part of your team, not take over your patients.

## ◆ Have you seen a patient in one of these situations?

These are the most common reasons why other dentists refer to a Prosthodontist:

- **Failing Restorations** — Broken or worn prosthetics, or poorly-fitting dentures
- **Implant Complications** — Mal-positioned or loose implants, or multiple systems
- **Severe Wear** — Advanced attrition from grinding or erosion, and collapsed vertical
- **Terminal Dentition** — Perio disease or neglect, requiring extractions and prosthetics
- **Edentulous Problems** — Resorbed ridges or lack of bone, wanting a fixed solution
- **Occlusal Issues** — Advanced mal-occlusion, jaw discrepancies, canted plane
- **Challenging Esthetics** — Un-esthetic restorations, high smile line, high expectations
- **Missing Anteriors** — Central incisors from trauma or laterals from genetics

### These “complex cases” may drain your time — how to help these patients:

Prosthodontists can be a resource to ask questions or help properly stage and manage complex treatment, often involving multiple specialists and providers over months of care. They can coordinate repair or replacement of teeth with fixed or removable prosthetics, to give patients ideal function and esthetics, then refer the patient back to you.