

CASE STUDY

Restoring Anterior Aesthetics After Trauma

Dr. David Sherberg



Before

After

Restorative dentistry is evolving fast. Between growing patient demand for aesthetic outcomes, the rise of digital workflows, and increasing pressure to improve efficiency without sacrificing quality, clinicians today face a unique balancing act. Especially in anterior cases, where expectations are highest, the need for precision, control, and lab collaboration is more critical than ever.

PATIENT PRESENTATION

In early 2025, I treated a compelling trauma case involving a welder who had suffered severe facial injuries in a work accident. The damage included multiple fractures, a broken nose, and compromised anterior teeth. Due to her extreme dental anxiety, IV sedation was required for every procedure.

This was more than a restorative case—it was a deeply personal and aesthetic rehabilitation. I had treated her before, and she trusted me to guide the final phase of her recovery: a three-unit anterior restoration (teeth #6–8) through Dandy's 3-Appointment Smile Makeover workflow.

CASE DESCRIPTION

Appointment 1: Consultation and Pre-op Scan

This case marked the final phase of the patient's comprehensive trauma recovery. She presented with fractured and discolored anterior teeth (#6–10)



Initial presentation: fractured and discolored anterior teeth following facial trauma.

following facial trauma. Tooth #7 required root canal treatment due to pulpal necrosis, while tooth #6 exhibited a subgingival fracture that extended near the epithelial attachment. Given the patient's severe dental anxiety, we completed all initial treatment—including the root canal, crown preparations, and intraoral scanning—during a single IV sedation session. It had to be right the first time. We had one shot to scan everything accurately and set the tone for a successful delivery.

We discussed her treatment goals and aligned on the vision for her smile. I completed a preoperative scan to give Dandy a clear view of her existing dentition and submitted a digital prescription for a Physical Wax-Up and Matrix for temporaries, along with a Design Preview to approve before fabrication.

Notably, I was able to take the final scan at the prep appointment without waiting for tissue maturation. Because we aimed to minimize the number of appointments under sedation, and her gingiva was healthy and stable, we confidently captured the final scan that same day.

Approving the Design for Complete Predictability

Using Dandy's Design Preview tool, I was able to review the proposed restorations digitally and make necessary refinements before moving forward. Once satisfied with the design, I approved it and was sent a wax-up and suck-down stent for chairside temporaries.



Proposed restorations for teeth #6–10, created using intraoral scan data to plan final aesthetics and ensure proper alignment, shade, and incisal edge position prior to wax-up.

Appointment 2: Photography, Preparation & Temporization

Prior to tooth preparation, I captured shade images using a DSLR equipped with cross-polarization filters to eliminate surface glare and isolate the tooth's true chroma and value. This protocol ensured accurate shade communication with the lab and facilitated a more predictable aesthetic outcome, particularly in the anterior zone where subtle shade discrepancies are most noticeable.



Polarized DSLR photography used pre-prep to capture accurate base shade—critical for anterior cases.

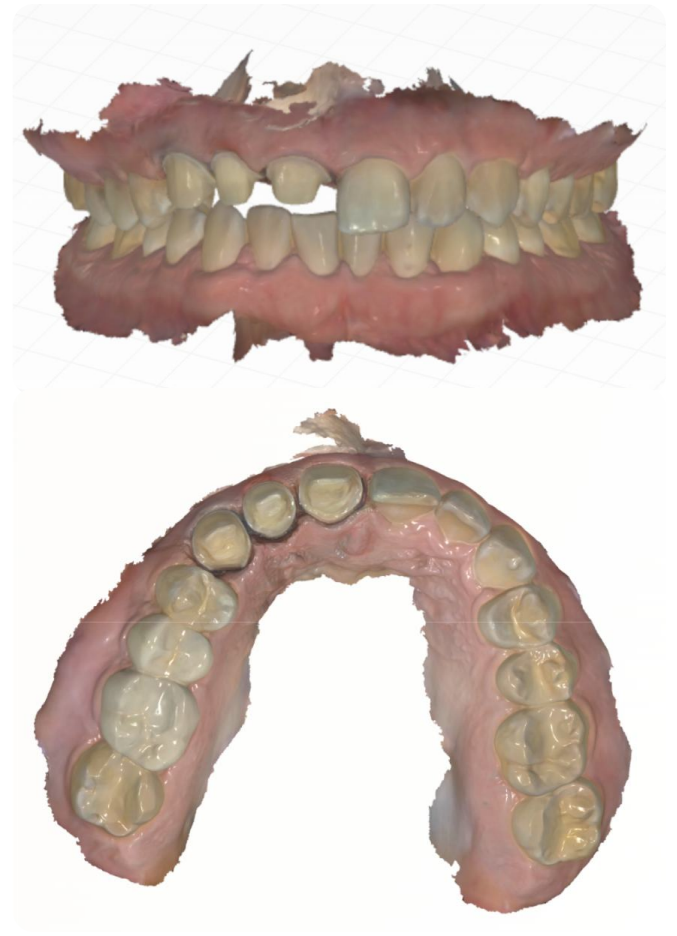
Retraction + Curettage Technique for Subgingival Margin Scanning

During the preparation appointment, I followed a systematic retraction approach. First, I placed a #000 retraction cord deeply into the sulcus. Then, I shaped the margins and contoured the soft tissue using a dry red-striped diamond bur. After that, I added a secondary #00 cord for 5 to 10 minutes, which I removed prior to scanning. The combination of the red-striped bur and the deep initial cord allowed for a clean, dry, and well-isolated margin.

To accurately capture the subgingival fracture on tooth #6, I used a dual-cord retraction and mechanical curettage technique. This approach provided excellent tissue displacement and

hemostasis—essential for exposing deep margins. The result was a clean field with clear visibility of the entire margin, including its most apical extent.

The intraoral scan captured the margin precisely, and I was confident in the visibility achieved both clinically and within my scan. Thanks to Dandy's Chairside software, the scan submission process was seamless, eliminating the need for redundant charting or manual file transfers.



Digital scan reveals perfectly retracted, visible margins critical to a successful prep scan.

Planning a Precise Smile Makeover

My approach to anterior aesthetic cases is all about predictability, with a focus on maintaining control from diagnostic wax-up through final delivery.

Wax-Up and Provisionals

To achieve esthetic harmony, I completed a diagnostic wax-up that mirrored the contralateral dentition. This allowed me to establish precise reference points for tooth morphology and midline alignment, ensuring symmetrical results. This wax-up served not only as a communication tool for the lab but also as the basis for provisional fabrication.

A vacuum-formed suck-down stent was created from the wax-up and used chairside as a provisional matrix, ensuring the temporaries replicated the intended final anatomy and provided the patient with a realistic preview of the expected aesthetic outcome.

To promote optimal soft tissue response, I applied a chlorhexidine varnish along the gingival margins prior to provisional cementation. This helped reduce bacterial load and inflammation during the healing phase. I then allowed for complete soft tissue maturation before capturing the final scan. Healthy tissue, clean scan, flawless fit. The gums healed beautifully—like nothing ever happened.

Temp-Reference-Scan

After soft tissue stabilization, we proceeded with final impressions and delivery planning. I used Dandy's easy-to-use Temp-Reference Scan to send the final scan. The Temp-Reference Scans allow lab technicians to use temporaries as design blueprints for more predictable final restorations.

The lab fabricated monolithic zirconia crowns based on this scan, the diagnostic wax-up and polarized shade photography captured pre-prep. This approach ensured consistency in both contour and color.

Appointment 3: Aesthetic Monolithic Zirconia

In appointment 3 I delivered the finals.

The final restorations for demonstrated natural translucency, balanced symmetry, and a shade match that closely reflected the patient's adjacent dentition. The margins were accurate, the emergence profiles intact, and the aesthetics highly acceptable for anterior placement.



Final result with monolithic zirconia restorations #6–#8. Natural translucency and symmetry achieved.

The restorations delivered excellent aesthetic quality at a highly competitive price point. They surpassed what I've seen from many traditional labs in both value and consistency.

DANDY'S TECHNOLOGY

Dandy's fully digital workflow takes the friction out of aesthetic cases—especially when following a streamlined 3-appointment protocol. Clinicians can preview and fine-tune restorations digitally before ever picking up a hand piece, submit shade photos in seconds, and trust the lab to deliver crowns that match the approved design down to the details.

By combining cutting-edge intraoral scanning, digital design tools, and real-time lab collaboration, Dandy helps dentists move faster, with more control and confidence. This results in more predictable outcomes, less chair time, and a dramatically smoother experience for both doctor and patient.

CONCLUSION & BEST PRACTICES

This case reinforced for me the clinical value of a streamlined, digitally driven workflow in managing anterior cases that demand both aesthetic and functional precision.

Several key tactics contributed to the successful outcome including capturing shade prior to prep, using my dual-cord curettage technique to ensure margin clarity, and approving the Design Preview prior to fabrication. In the end, the 3-Appointment Smile Makeover workflow was essential to achieving a predictable aesthetic result with long-term durability.



ABOUT THE AUTHOR

Dr. David Sherberg

Dr. David Sherberg is a resident of St. Petersburg, FL. He founded Bayway Dental with the goal of providing most, if not all, dental services for his patients right at his office.

After graduating from the University of Connecticut School of Dental Medicine, Dr. Sherberg opted to continue his education with an Advanced Education in General Dentistry Residency at Virginia Commonwealth University.

He has received extensive dental implant continuing education, including the Comprehensive Interdisciplinary Dental Implant Certification at the University of Florida, Full Arch Guided Surgery, and Immediate Teeth (Same Day Teeth®) training from The Pikos Institute, and membership in the International Congress of Oral Implantologists.

As a testament to his commitment to excellence in IV sedation dentistry, he is a certified DOCS Education member.