

dandy

CASE STUDY

2-Appointment Cast Metal Partial Dentures

Dr. Robert Lee



BEFORE



AFTER

2-Appointment Cast Metal Partial Dentures

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At my practice, we've found that our priorities are the same ones our patients care about most: less time in the chair, fewer appointments, and lower costs. Taking my practice fully digital has helped on all three of these fronts. By adopting highly efficient and accurate scanning technology, our practice has reduced wait times, cut material expenses, and removed the need for traditional impression materials that many patients find uncomfortable.

Many of my patients travel a long way to see me, so fewer appointments matter. They also love being able to see exactly what we're doing on the scanner screen—it's more engaging and genuinely exciting for them. And the scanner software includes tools that make capturing the perfect scan easy. It provides real-time guidance to ensure that every scan is complete and accurate before the patient leaves the chair.

For partials, this technology makes the best impressions I've ever seen, and I've been doing this for 40 years. I used to spend twice as much time on these cases. These days, I can step away and my assistants can help do most of the scans. And it's rare that I ever have to come back in to help with the scans because it's so intuitive. After capturing the scans, we send the case to the lab with a click—and what comes back is remarkably accurate. We're just doing one scanning appointment, and we usually skip the try-in.

Before going digital, partials didn't always fit as precisely as I wanted. As demonstrated below, this digital workflow is easy to follow and ensures a predictable, accurate fit every single time.

CASE DESCRIPTION

The following case illustrates how scanning technology has transformed the way I deliver partial dentures. What once required multiple appointments, patient discomfort, and labor-intensive model pours and wax resets can now be completed in just two visits—saving significant chair time for both me and my patients.

PATIENT PRESENTATION

The patient first came to our practice in 2019 and had previously received a partial denture to restore edentulous spans in the area areas of teeth #19, 20, 29 and 30. She is now 65 years old, and while her partial has served her well over the years, during a recent visit she complained that the appliance had worn down and had become less stable.

Although the patient initially requested repairs to improve the fit and comfort of her lower partial denture, she ultimately chose a new replacement after learning it could be provided at a very reasonable cost. With a simple series of fast, high-precision scans, she was able to go home with her existing appliance and return for delivery of her new partial at the next visit.

In addition to a streamlined workflow, the patient received a partial denture that combines the precision of digital technology with the strength and aesthetics of acrylic. This is made possible through technological innovations at Dandy's dental lab, which integrates CAD/CAM fabrication with injection molding.



The patient presented with edentulous spans in the areas of teeth #19, 20, 29 and 30 that were restored many years ago with a partial denture.



Her partial had become loose-fitting over time, and although she requested repairs and adjustment, she was thrilled to learn that she could receive a new appliance at her next visit based on scans acquired at her initial visit.



Note the wear on the lingual aspect of the patient's appliance. The new replacement partial would be digitally fabricated with a cast metal framework and an acrylic base through a new manufacturing process from Dandy that combines the speed and precision of digital with the durability and aesthetics of acrylic.

APPOINTMENT #1

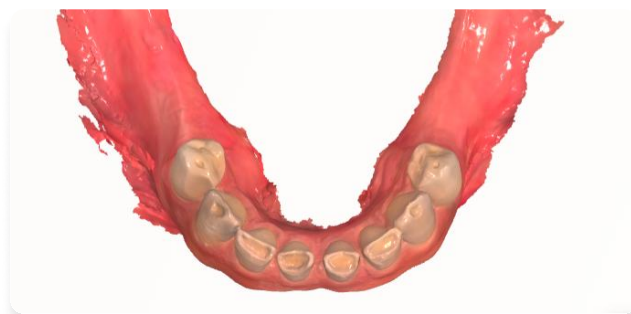
EVALUATION AND SCANS

The patient, who presented for treatment with a mandibular partial appliance as well as a full upper denture, desired better stability and function of her partial denture. After evaluating the contralateral edentulous spans and her remaining dentition, we determined that the issues with her lower arch could be addressed by replicating her partial denture and requesting improvements through the lab for fit, function and durability.

In addition to becoming loose-fitting over time, the patient's existing partial exhibited wear on the lingual aspect of the appliance. To efficiently provide a replacement partial denture, all that was needed was a simple series of scans of the patient's lower arch, upper arch and bite, along with a 360-degree extraoral scan of the existing appliance.

Our team performed the scans with ease, as the Dandy Vision scanner paired with Chairside software includes assistive technology that guides you through each scan with ease and flags any potential issues with your digital impression to make sure everything is accurate and complete before your patient leaves the chair.

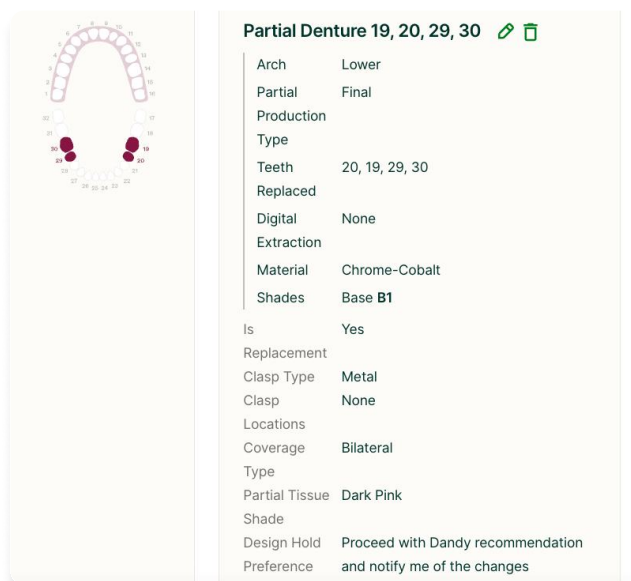
When submitting the scans for fabrication, we requested a thin lingual bar for the appliance and the adjustments needed to provide a stable, well-fitting new partial for the patient.



The patient's lower arch was scanned so the lab could make the adjustments to the partial design needed to ensure a secure, comfortable fit for the patient.



A bite scan was also taken with the partial and opposing full denture in place. The intraoral scans were sent to the lab along with a 360-degree extraoral scan of the existing lower appliance with a simple click of a button.



The Dandy Vision scanner paired with intuitive Chairside software eases case submission, ensuring the precise scans and details needed to accurately fabricate the restoration are captured and communicated to the lab.

APPOINTMENT #2

DELIVERY OF NEW PARTIAL DENTURE

After we reviewed and approved the digital design created by the team at Dandy's dental lab, the patient returned to our practice for delivery of her new partial denture. The denture was digitally fabricated with a chrome-cobalt framework and clasps with a high-strength acrylic base and denture teeth.

The new partial denture was seated and immediately exhibited a precise fit. The patient was extremely happy with the stability, comfort and function of her new appliance and remarked that it was the easiest dental procedure she's experienced.

This simple two-appointment workflow saved valuable time for the patient and has been equally valuable to my practice, where I place a premium on chair time. I'm now able to complete a significantly higher daily caseload than before—thanks to intuitive intraoral scanning and streamlined digital workflows that make clinical efficiency effortless.



The new partial denture produced by Dandy's dental lab featured a chrome-cobalt framework and clasps, and was produced with an acrylic base that offers the durability needed for a long-lasting appliance resistant to wear.



The lower partial was seated and fit precisely, reestablishing the comfort, prosthetic stability and function that the patient desired.

PATIENT BEFORE & AFTER



DANDY'S TECHNOLOGY

Prior to the introduction of Dandy's scanning technology and time-saving digital protocol for dentures, this process would have required several appointments and multiple physical models and try-ins. Now, I'm able to treat a higher volume of patients each day while maintaining a high standard of care. And my entire team's work has been made easier by the scanner's assistive technology, which guides us through each step of the case and helps ensure we capture the precise scans needed for consistently accurate restorations.

CONCLUSION AND BEST PRACTICES

While intraoral scanning has significantly reduced the time and resources once required for VPS impressions, stone models, wax setups and resets, and outbound shipping, its greatest impact in my practice has been on how removable appliances are fabricated. This shift has transformed the restorative experience for my patients, allowing cases to be completed with fewer appointments and far less time in the chair.

Just as importantly, I can now deliver restorations with a high level of confidence in their accuracy and fit, case after case. These digital workflows have proven to be the most meaningful and valuable change I've made in my practice.



ABOUT THE AUTHOR

Dr. Robert Lee

Dr. Robert E. Lee is an experienced general practitioner with decades of clinical experience and a strong focus on efficient, patient-centered care. Dr. Lee received his DMD from the Medical College of Georgia at Georgia Regents University, has completed advanced training in implantology and is an active member of the Georgia Dental Association and the American Dental Association. He is particularly passionate about leveraging digital technology to improve accuracy, reduce chair time, and enhance the patient experience. Dr. Lee loves interacting with people, especially his senior patients, learning from their life experiences and applying that knowledge to his own life.