

Profit is not a dirty word my friends! In the dental environment today, profitability needs to be part of our awareness, engrained in the DNA of the modern dentist. I hold to the belief that all that glitters is not gold. I love helping people, but my preference is to do so while making a profit.

With some 40% (on average) of our practice revenues coming from crown and bridge procedures, profitability remains critical. And maybe it's just me, but I feel like we have all been there. Nothing makes the flow of an appointment skip a beat like an unforced procedural error or worse, an unforeseen error! Furthermore, these afflictions plague efficiency and dog-down workflow. Each error compounding upon the next, resulting in lost time, production and revenue. Errors call for solutions that are procedure-based. For solutions to work, I believe the formula should look like this: (consistency + predictability) x efficiency = profitability.

I have decided that my least favorite part of crown and bridge is capturing the impression. Why? It takes a lot of work! Not just that, misses COST YOU! If you miss on the first try, then the situation becomes more frustrating. Your profit margin shrinks, operational costs increase, and thoughts begin to surge in your head: The patient is judging me, they think I did something wrong!?!?!?! Why did I miss? Man, I am behind! Ugh. I hope it works this time...it better work this time!!!

Again, I have watched myself throw dollars away when my impression material has failed for one reason or another. With so many pitfalls to impressioning (prep design, tissue management, materials etc...), how can one enter the anointing of ease—the sweet spot where consistency wins the day, predictability is your middle name and things get done right the first time?

The answer to me is simple: build in flexibility, choose great tools for the job and deploy techniques that influence outcomes.

In the following case review, I will address the before mentioned issues:

Patient TF presented for a routine hygiene appointment, at which time he was given a thorough exam and x-rays. During the exam it was noted that the margins of his lower left crowns were lacking integrity and in need of replacement. The extent to which tooth #18 was compromised led to #18 first being root canal treated using the WaveOne® Gold System (Dentsply Sirona Endodontics) (See Image 1). Upon completion of the root canal and core, the patient was then prepped and provisionalized using Integrity® Multi•Cure material (Dentsply Sirona Restorative). The patient was dismissed from visit one and instructed to rinse using a chlorine dioxide rinse for a two-week period to allow for healing after a lengthy and productive first visit.





is a general dentist practicing in Cleveland, Ohio. His background in dentistry is lengthy and diverse. Once a former chairside assistant, he also worked as a dental lab technician, making his perspective unique among others in the field of dentistry. He received his DDS from the University of Michigan School of Dentistry. He is currently a member of the American Dental Association and a Fellow in the Academy of General Dentistry.

At visit two, the temporaries were removed, preps finalized and refined (see image #2). The preps were prepared for impressing using retraction paste and complimentary compression caps (see image #3). The final impression captured using Aquasil® Ultra+ Smart Wetting® Impression Material delivered with digit Power® Dispenser (Dentsply Sirona Restorative).

At visit three, crowns were delivered and conventionally cemented.

What worked well and what made this a successful case start to finish? It begins with setting expectations. The first mistake most dentists make is not giving themselves cushion to adapt to what the case presents in vivo. In this case, my cushion was letting the patient know UPFRONT, a root canal may be eminent. Having the ability to call an AUDIBLE is important. Just as in sports, sometimes things change, and the circumstances warrant adaptation.

I do not believe it is standard practice for cardiologists to wake patients during surgery to explain that an additional bypass is needed/necessary. They predict what they expect to find and ask for consent BEFORE the surgery to accommodate for any changes that may occur. What's my point? We need to suggest to our patients what may happen before we begin. In this case, I went in to an appointment thinking "crown prep and impression". I ended up doing a root canal, two build-ups and two crown preps/temps. My team was ready for the possibility and the patient went into the visit knowing as well. The communication piece was vital to the first visit's smooth flow and profitable outcome.

Next, I had a plan. That plan began with a prep design that is simple and efficient. I advocate one bur, one prep. My preferred prep-design for fixed crown and bridge are modified-shoulders. In my opinion, KR Modified Flat-End Taper burs are ideal to create a shoulder look BUT ALSO with a rounded internal line angle design. These features allow for a crisp, clean-look margin that is compatible with porcelain indirect material requirements.

In this case, I chose a multi-use bur due to multiple preps being involved. My background as a dental lab technician has taught me over the years that if I can provide the lab with a circumferential, 360-degree 0.8mm shoulder/chamfer, they can provide me with any material choice and design feature required for case completion.

With the continuous advance in dental materials and the myriad of choices, dentists are often frustrated by selection of indirect materials. I firmly believe that when simplicity increases, so does effectiveness. For this reason, by deploying a one-size fits-all-prep that accommodates nearly all indirect material requirements, dentists can simplify the process and increase efficiency, productivity and ultimately profitability.

Additionally, it is interesting that molars continue to be the biggest frustration for dentists. Molars, according to research¹, are adequately retained in tipping test only 46% of the time. Translation: molar crowns are the most likely crowns to dislodge in function. The solution is strategically placed molar grooves. By prepping mechanical retention into our prep design (see image #8 molar preps), we can become less reliant on cement being the sole source of crown retention².



1. X-ray image of completed RCT #18, cores, preps and temps



2. Healing after two weeks on Chlorine Dioxide rinse (OraCare)

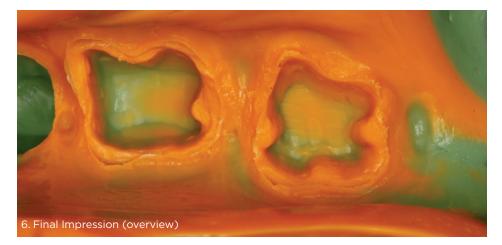


3. Retraction caps & paste



4. digit® Power Dispenser delivering wash to preps with precision

With the details in place, accurately capturing this information is a first-time must! I prefer materials and solutions that make my job easier, especially at this critical juncture in the crown and bridge visit. The mouth is at times an ocean of fluid, booby-trapped with soft tissue making our capturing of hard tissue margins a thrilling adventure.



Over the years, I have tried many solutions geared at overcoming the common impressioning challenges faced by "wet-fingered" dentists. Some products were novel, others inexpensive. What has become crystal clear after 12 years chairside: you get what you pay for AND the tools we choose to use, really do make (or break) the job. I find many products work well in near-ideal conditions. Yet the more I practice, the more anything but IDEAL seems to be in my chair! This has led me to continually be on the look-out for products that simplify. The Aquasil® brand has a long track record of reliability and accuracy. The new Aquasil® Ultra+ is an evolution and enhancement of its predecessor, specifically designed to deal with real-life challenges, real dentist faced chairside. In addition, Dentsply Sirona designed the digit Power® Dispenser to come alongside its premium PVS (Aquasil® Ultra+ Material) and to predictably-precisely deliver it to your prep (see image #4). The results are breathtaking impressions, captured worry-free with pushbutton accuracy and timing (see images #5-7).

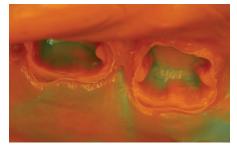
The thought of capturing impressions has shell-shocked me after years of frustration and failures. I breathe a bit easier these days. I have had the chance to watch my work age and learned tips/tricks that let me tangibly see a positive difference; evidence that I am getting better. Evaluated experience has taught me the value of procedure-based solutions. Furthermore, the years have proven that when I plan ahead and deploy user-friendly products, techniques and ideas, I can exhale and drill on. When material choice is combined with setting expectations and proper planning, I am able to be consistent and efficient, and I am able to be profitable.

References

- 1. Parker MH, Malone KH 3rd, Trier AC, Striano TS. J Prosthet Dent. 1991 Dec;66(6):730-3.
- Woolsey GD, Matich JA.
 J Am Dent Assoc. 1978 Dec;97(6):978-80.



5. Final Impression (buccal margins)



7. Final Impression (lingual margins)



8. Model View of stone dies/preps



9. Buccal View of cemented crowns



10. Lingual View of cemented crowns