Driving Better Practice Economics with the GentleWave® System

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About the Author

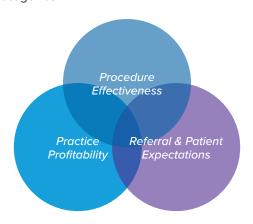
Dr. Marcus Palermo graduated from University of the Pacific School of Dentistry in 2005 and received his endodontic certificate from Temple University in 2007. He practices in Santa Fe, New Mexico, and has been using cone-beam computed tomography (CBCT) in his practice since January 2010. Dr. Palermo incorporated the GentleWave® System in March 2017. He is happily married and has two young children. He enjoys traveling and spending time with family whenever he can get away from the office.



Achieving Practice Success in a Changing Market

Defining success drivers for an endodontic practice can generally be grouped into three key categories: Procedure Effectiveness, Referral & Patient Expectations and Practice Profitability.

The decision to invest in new technology for your endodontic practice should involve evaluating whether the technology can improve upon one or more of these categories.



For some, success may be achieved simply by delivering the most effective procedure and providing the best patient outcomes. For others, success is defined in purely logical financial terms: attracting more referrals, driving practice growth and outpacing the competition. I would argue that for most clinicians, it's a combination of the two. The reality is that in today's marketplace, general practitioners are making fewer referrals every year, preferring instead to keep endodontics (and the perceived profits derived from these procedures) in house or to move their patients toward implant dentistry. When they do refer, they do so when they feel the specialist can do a better job than they can, or they feel the specialist can provide a broader range of options for their patients. Additionally, patients want to save their teeth but they don't want a standard root canal treatment. Incorporating technology such as the GentleWave Procedure into your endodontic practice has demonstrated the ability to satisfy each of the key drivers for a more successful practice.

Delivering on the Promise of Better Results

When Santa Fe Endodontics first opened, we had two goals in mind. The first was to offer patients the most effective results possible while minimizing the potential for failure. To do so, we often brought patients in for multiple visit procedures, sometimes using as many as three or even four treatment sessions. We knew absorbing those costs would lead to happier patients, which would in turn foster good relationships with referring practices. We also saw dividends in terms of our online reviews, as many patients wrote recommendations that I could not have scripted better if I were writing an ad campaign. Our reputation—and our patient base—grew considerably as a result.

As we took the time to complete root canal therapy over several treatment sessions, we found that achieving excellent results took a toll on overall productivity; in fact,



approximately 50% of our cases in 2015 were the result of patients coming in for multiple treatments. In order to grow, we needed something that could reduce the number of visits for each patient, while still achieving the same or better success rates. We knew this would enable us to expand our overall patient base. That brings us to our second goal.

Setting Yourself Apart from the Competition

Our second goal was to take the necessary steps to differentiate our practice from other endodontists. Establishing ourselves as the only endodontic practice in the area to integrate cone-beam technology, for example, went a long way toward establishing us as a forward-thinking practice among referring practices. As CBCT costs decreased, other endodontists in the area incorporated it as well. When we discovered the GentleWave System from Sonendo®, we realized this could be the differentiator our practice needed to help the practice grow.

The GentleWave System uses advanced fluid dynamics and broad-spectrum acoustic energy to deliver powerful vortices of optimized fluids throughout the root canal system.^{3,4}

When we discovered the GentleWave® System from Sonendo®, we realized this could be the differentiator our practice needed to help the practice grow.

The GentleWave Procedure is able to reach places within the root canal structure that are not visible and cannot be touched with conventional instrumentation.

The GentleWave Procedure effectively cleans throughout the complex anatomies of the root canal system, removing tissue, debris, biofilm and bacteria from crown to apex, isthmi, lateral fins, dentinal tubules and other anastomoses.^{5,6,7} I recently hosted an evening event for



referring practices where I demonstrated the effectiveness of the GentleWave Procedure and explained that, although we are now treating patients in a single session, there will be no drop-off in quality.

I explained to referring practices that the look of endodontics coming from my practice was going to change. There would be a shift away from the continuous taper, the larger orifice, instrumenting right to the apical foramen and showing super thick, dense canals. They would see a smaller opening because the GentleWave Procedure empowers me to deliver thorough cleaning with minimal instrumentation.⁸ After the presentation, I saw another increase in the number of referrals we received.

Offering Patients a True Alternative to Standard Root Canal Treatment (RCT)

The GentleWave System's mechanism of action, in which optimized cleaning fluids thoroughly clean from the crown to the apex in just one appointment⁹, means we are able to offer patients an effective alternative to standard root canal treatments, which already have a negative connotation in the mind of many patients. That is especially important when referring practices offer patients a range of choices for their endodontic work.

Thanks to the internet, patients have greater access to information now more than ever. And when a referring practice gives them a few names to choose from, you can rest assured they will be using Google to help make an informed decision. The GentleWave Procedure has, in many cases, served as a tipping point for patients who are considering their root canal options. When they look us up online, they see our online reviews first, which



helps steer them toward us. Once they see comments from previous patients saying that the GentleWave Procedure offers faster healing and less sensitivity—and

can be completed in one appointment—they are even more likely to choose us over other practices.

For those patients who have not done their homework regarding the GentleWave Procedure, education during the in-office consultation is essential. Whether they have had a negative experience with root canal therapy in the past, or they simply have trepidations about RCT, I find the GentleWave Procedure conversation to be an easy one. Patients tend to light up when they learn about a one-session procedure that other patients have called comfortable and faster healing that delivers impressive results. In fact, whenever I have presented patients with the GentleWave Procedure option, not once has anyone chosen standard RCT.

Anticipate Tomorrow by Innovating Today

Even while our industry seems to be in a constant state of change, our actual approach to endodontics has seen only incremental innovation. While instrumentation and techniques have gradually improved, the basic principles of endodontics remain more or less the same. The following examples help illustrate the clinical benefits that come with staying ahead of the curve.

Let's start with a case from 2006 (Standard RCT Circa 2006). As you can see, the canals are extremely large, in keeping with best practices from the time. Everything you see here was hand filed and no rotaries were used, making it a great source of pride at the time. Today, I see a tooth that is in serious danger of fracturing over time and may be lost prematurely due to that fracture.

(Standard RCT Circa 2006)





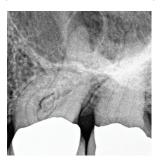


Post-Operative Radiograph

The next case is from 2010 (Standard RCT Circa 2010). Treatment was completed over three visits and took a total of six hours to complete. This was due in part to the severe curve of the MB root, as well as a lesion and necrotic diagnosis. I finished the canals with a ProTaper F1 Rotary file which is approximately a 20/.09. This was

smaller apically than I did in 2006, but it still had a large coronal flare, which was necessary to get irrigants to the apices.

(Standard RCT Circa 2010)



Pre-Operative Radiograph





1-Year Recall

Standard RCT prior to adopting the GentleWave® Procedure:

- Three visits
- Six hours of treatment
- Large coronal flare for irrigants

Today, with the GentleWave System, this procedure can be accomplished in a single visit and finished without the need to file larger than a 20/.04 or 20/.06.

CASE 1

This is a case that came in presenting very much like a root fracture. There was extensive furcal bone loss with a 9mm buccal pocket. The patient was a 51-year-old male at the time of presentation. He was asymptomatic and his general dentist had recently attempted to restore the distal caries, but there was a pulp exposure and he was referred for root canal therapy. The distal was restored with a Pre-Endo build-up to facilitate RCT. An electrosurge was used to remove gingival tissue covering the distal caries. The GentleWave Procedure was completed in



Pre-GentleWave® Procedure Radiograph



Pre-GentleWave® Procedure CBCT (Sagittal slice, 1mm thickness)



Post-GentleWave® Procedure Radiograph



4-Months Post-GentleWave® Procedure CBCT



4-Months Post-GentleWave® Procedure Radiograph



8-Months Post-GentleWave® Procedure Radiograph

a single visit. The tooth was restored with Build-It FR Dual Cure Composite Resin in shade Opaceous White. A Brasseler Sequence post size Small/.04 was placed in each distal canal. The patient was seen four weeks post-op to monitor for resolution of the buccal pocket. At that time, the previously 9mm pocket was measuring 2mm and the patient was advised to move forward with his crown. Four months post-GentleWave Procedure, the patient was recalled and remained asymptomatic from the time of treatment completion and was very happy about saving his tooth.

CASE 2

Here is a case that I treated in a single visit with the GentleWave Procedure. I may have done this in a single visit with standard RCT, but I would not have had such minimal canal preparations without the GentleWave Procedure. I also would not have been able to clean, disinfect and debride all of the apical anatomy in the palatal root.



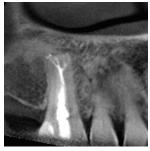
Pre-GentleWave® Procedure Operative Radiograph



Post-GentleWave® Procedure Operative Radiograph



Post-GentleWave® Procedure Radiograph (Negative)



Post-GentleWave® Procedure CBCT (Sagittal Slice of Palatal Root, 1mm thickness)

CASE 3

This was a single-visit case that, without the GentleWave Procedure, would have required multiple visits due to the lesion and necrotic diagnosis. Patient was a 70-year-old female. It is important to note on this case that the "apparent marginal caries" is actually toothbrush abrasion. This tooth on the PA images looks like the bridge is decayed, which



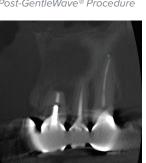
Pre-GentleWave® Procedure CBCT (Sagittal slice, 1mm thickness)



Post-GentleWave® Procedure Radiograph



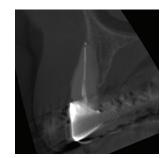
3-Month Recall
Post-GentleWave® Procedure



4-Year Recall
Post-GentleWave® Procedure
CBCT (Coronal slice, 1mm thickness)



4-Year Recall Post-GentleWave® Procedure



4-Year Recall
Post-GentleWave® Procedure
CBCT (Sagittal slice, 1mm thickness)

it is not. The shadowing on the crown margin is due to recession and tooth-brushing, causing a groove to form on the root. The bridge is stable and has been in service for 35 years.

This case was treated with no rotary files. I simply used apical gauging to measure the canal and determine the size of gutta-percha that would be used to fill and went straight to the GentleWave Procedure. Three-month and 4-year recalls show healing.

CASE 4

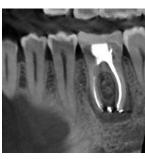
Here is another single visit GentleWave Procedure. This was a 34-year-old male who presented with a history of pain. He had pain and swelling, which cleared up after taking Amoxicillin 500mg T.I.D. for 7 days as prescribed by the referring doctor.



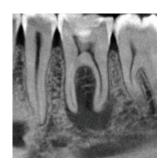
Pre-GentleWave® Procedure Radiograph



Post-GentleWave® Procedure Radiograph



6-Month Recall
Post-GentleWave® Procedure
CBCT (Sagittal slice, 1mm thickness)



Pre-GentleWave® Procedure CBCT (Saaittal slice, 1mm thickness)



6-Month Recall Post-GentleWave® Procedure

GentleWave® Procedure:

- Single-visit⁹
- Minimal Instrumentation
- Asymptomatic postprocedure & at sixmonth follow-up

The tooth had a Class II Mobility, there were no probings deeper than 4mm and it was tender to palpation, percussion and biting. The tooth tested necrotic.

We did a single-visit GentleWave Procedure and the recall images are six months post-op. The patient remained asymptomatic since the procedure was completed.

CASE 5

In the final case, we see evidence once more of how the GentleWave Procedure has delivered dramatic clinical results with technology that is truly groundbreaking. The patient seen here is a 71-year-old woman who presented with significant pain on palpation. The diagnosis was pulp necrosis with symptomatic apical periodontitis. Using standard RCT methods, this case would have required multiple visits with calcium hydroxide Ca(OH)₂. We were



Pre-GentleWave® Procedure Radiograph



Post-GentleWave® Procedure Radiograph



Pre-GentleWave® CBCT (Coronal slice, 1mm thickness)



1-Year Recall Post-GentleWave® Procedure CBCT (Coronal slice, 1mm thickness)

able to treat this patient in a single visit with the GentleWave Procedure and one year later are still seeing excellent healing.

Doing Well by Doing Good: The Bottom Line

Our ability to deliver great patient outcomes using technology that truly sets our practice apart has led to dramatic increases in our market share—and our revenues. Much of that increase can be directly attributed to the

incredible decrease in multiple-visit treatments that we are now able to treat in one GentleWave Procedure session, with improved clinical efficacy.

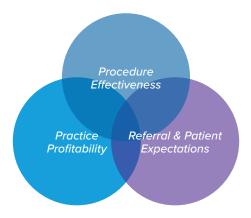
We installed the GentleWave System in March 2017. In January 2018, we saw a 28% increase [in revenue] over January 2017.

In 2016, approximately half of our cases were part of a multiple-visit regimen. Since introducing the GentleWave System, virtually all of our cases have been completed in a single visit. In addition, as testimonials have spread about the efficacy and comfort experienced from the GentleWave Procedure, patients are asking for it by name. Furthermore, our referrals have increased and will perhaps provide long-term help to reverse the trend of general practitioners in our area who are performing endodontic services in-house. We are now able to take on more patients than ever, which has had a tremendous impact on our bottom line.

We installed the GentleWave System in March 2017, and we immediately saw our collections begin an upward trajectory. April, May and June 2017 were all record months for our practice, and 2017 was up about 9% over 2016. That

When compared to 2016, the last full year I practiced without the GentleWave System, 2019 totals were up over 80%.

means we were able to recoup the expenditures related to the purchase of the GentleWave System, along with new procedure instruments and greater volume of irrigants, and still exceed our return on investment. In January 2018, we saw a 28% increase over January 2017, and 2018 overall ended up being a 22% increase over the year before. And 2019 was another record year. When compared to 2016, the last full year I practiced without the GentleWave System, 2019



totals were up over 80%. The GentleWave System has been so beneficial, I have invested in a second system, and I was able to expand my practice by installing and equipping two additional operatories.

We are seeing increases in our overall profitability, and I am also pleased to report that this has occurred because referrers and patients alike are seeing the value in what we do. The GentleWave System has given us the power to provide truly effective procedures that place less demand on the patient's time and deliver results that have helped me find a renewed sense of joy in my profession. Investing in your practice can feel like a leap of faith. Knowing your investment is based on a solid strategy rooted in delivering great results for your patients and setting your practice apart, it's more than a leap of faith; you have the power to do good for your patients—and do well financially.

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