

FEWER STEPS, MORE CONFIDENCE

Save time and steps with an enhanced irrigation protocol from Vista Apex. You'll get clean and pristine with no rinsing in between.

Easy as
1, 2, 3

\$100 OFF
Endo Ultra

+ Free Solutions

Use Code:
fewsteps100



Irrigation
Protocol
Inside!



Increased Efficacy & Efficiency During Endodontics Can Be Win-Win For Our Patients & Our Practice



Figure 1. The workflow.

Written by Dr. Mike Miyasaki, Chief Dental Officer, Vista Apex

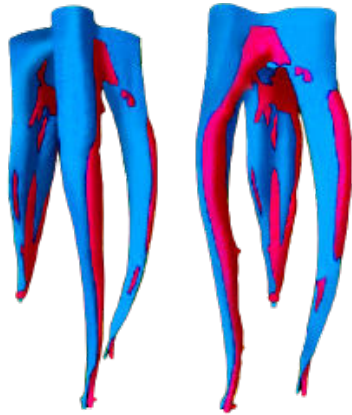
John, arrived, tooth (or the crown) in hand, and he wanted the tooth put back together. We advised John that the tooth should be extracted as there were numerous missing teeth and being a cuspid this tooth was under immense occlusal loading. This is an all too familiar scenario. How would you handle this case?

Your patient trusts you and would love you to treat him now!

Let's follow this case further, John was given the option that I felt would be best, to extract the root and possibly replace it with an implant or removable prosthesis. He wanted to save the

tooth. We said we would do so but with caution. Our workflow went as follows (figure 1). First, we put the fractured crown back on the tooth to scan (since he was comfortable and used to it we planned on duplicating it). We then bonded some build-up material onto the tooth and prepared our margins. This rough preparation was scanned so we could begin milling the crown. So once the root canal was completed, we placed the final post and build-up, confirmed the crown fit and cemented the crown into place. This meant the root canal procedure, post and core build-up and fabrication of the crown were all done in under two hours.

I felt there were two important parts in the success of this treatment. First, we had to gain adequate ferrule on the root, and second, we had to perform a successful root canal



RED - areas that have not been treated with endodontic instruments and remain infected.

BLUE - areas after preparation that have been treated. Instruments leave a significant amount of the canal covered in smear layer, leaving the canals populated with bacteria and debris.

Figure 2. Research by Dr. Ove Peters illustrated that conventional hand instrumentation leaves approximately 35% of the canals untouched. The blue indicates the instrumented canal surfaces, and the red shows that which is uninstrumented.

treatment. The root canal architecture is a tortuous system (figure 2), and there are often areas beyond that which our files can reach. Yet our endodontic success depends on our thoroughly cleaning the canal system.

Because of the complex canal system research shows that when we mechanically file a tooth's canal system 45-65% of that system remains un-instrumented. The result can be endodontic treatment that fails to heal properly, an unhappy patient and a headache for us. But when a clinician can properly diagnose, perform a root canal procedure and restore the tooth the patients are very appreciative, and it can be a very productive appointment.

One problem here can be the speed at which the filing and obturation of the canal system is done today. There is significantly less time for our irrigants to dissolve the tissue and disinfect



Figure 3. A line of endodontic irrigants available from Vista Apex Dental Materials.

the canals. So, we must use the best, and most effective irrigants available (figure 3). Vista Apex Dental Materials has been an innovator in endodontic irrigants for decades. They manufacture pharmaceutical grade sodium hypochlorite in both 3% and 6% solutions, which are needed to predictably dissolve the tissue in the canals and disinfect. Store bought, Chlorox is designed to clean clothes and home surfaces not disinfect root canals, therefore, it can be highly variable in effectiveness and its concentration maybe up to 8% or close to zero depending on its age, how it was transported and how it was stored. Vista Apex's 17% EDTA is more effective than others, with a pH of 8.5 to optimize the its chelation properties.

Delivering the irrigants into the root canal system is best done with side-vented or side-port needles to avoid expressing the irrigants beyond the root apex. Vista Apex has very reasonably priced tips called the Voyager

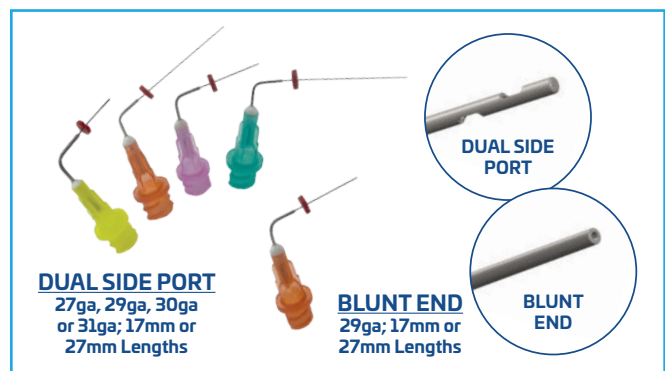


Figure 4. Voyager Dual Side Port and Blunt End Irrigating Tips.

ENDO|ULTRA

VISTA APEX



Figure 5. EndoUltra® Cordless Ultrasonic Activator.

Irrigating Tips (figure 4) that do just this, direct the irrigant flow to the side avoiding an apical extrusive pressure.

Activating the solutions while irrigating the canals has been shown to markedly improve the cleaning of the canals. More specifically, the use of the EndoUltra® (figure 5) ultrasonic

activation to agitate the irrigating solutions has been shown to be very effective. Once the canals have been filed to a #30 or 35 file to length the EndoUltra® ultrasonic activator can be inserted into the canal to increase bacterial kill significantly (figure 6).

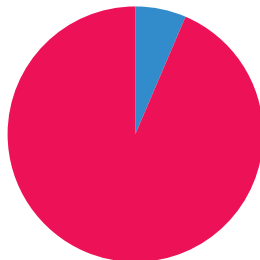
Vista Apex also makes enhanced irrigants with surfactants that lower their surface tension and enhance their penetration. Chlor-XTRA™ is an enhanced 6% NaOCl that dissolves tissue twice as fast as sodium hypochlorite by itself. SmearOFF™ 2-in-1 that combines EDTA with CHX, and CHX-Plus™. Each of these products are enhanced with surfactants that increase their efficacy and your efficiency. The more effective Chlor-XTRA™ offers greater safety for the patient because when mixed with the chlorhexidine in SmearOFF™ 2-in-1 it will not create the precipitate, para-chloroaniline.

Endodontics is rapidly changing and improving. Today's new files, handpieces, apex locators and the use of CBCT is making it possible to perform endodontic procedures much more quickly. But the need to adequately remove the tissue and disinfect the canals in a speedier fashion are helped by using the improved action of enhanced irrigants, with the safer syringe tips, and ultrasonic activation.

How did our beginning story end? As John was leaving, with an anesthesia drooping smile, he commented on how happy he was since he arrived with no tooth and was leaving with a tooth.

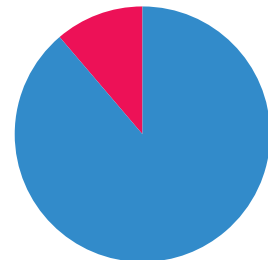
SONICS

■ Cleaned Canals
■ Uncleaned Canals



ULTRASONICS

■ Cleaned Canals
■ Uncleaned Canals



In a study by Dr. Van der Sluis, devices, like the EndoUltra® are 89% effective in cleaning of the canals completely free from dentine debris, compared to the sonic group of 5.5% - 6.7%.

Figure 6. Improved cleaning of the canals obtained using Ultrasonic activation of the irrigants.

Click Here to Learn More About Vista Apex Irrigants, or Scan...



Chlor-XTRA™



Kit Options

503825-2
(10) 3mL
Prefilled Syringes

503850-2
(10) 12mL
Prefilled Syringes

503800-2
16oz. Bottle

SmearOFF™ 2-in-1



Kit Options

317112-2
4oz. Bottle

317111-2
16oz. Bottle

EDTA - 17% Solution



Kit Options

317011-2
16oz. Bottle

Sodium Hypochlorite



Kit Options

502335-2 | 502350-2
(10) 3mL Prefilled
Syringes (3%/6%)

502315-2 | 502300-2
(10) 12mL Prefilled
Syringes (3%/6%)

317018-2 | 317008-2
16oz. Bottle (3%/6%)

CHX-Plus™



Kit Options

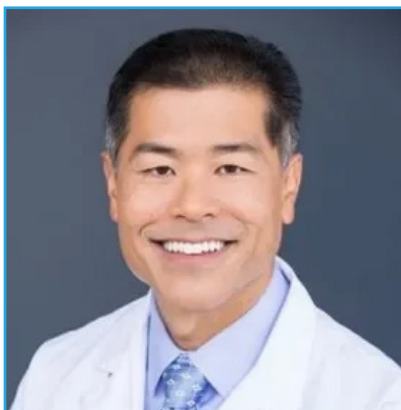
503900-2
16oz. Bottle

CHX Restorative



Kit Options

317010-2
16oz. Bottle



About the Author

Dr. Michael A. Miyasaki is a 1987 graduate of the University of the Southern California School of Dentistry, and has always maintained a practice focusing on comprehensive, minimally-invasive aesthetic restorative dentistry and function. With over 2 decades of clinical and teaching experience, Dr. Miyasaki has established himself as a leading figure in the world of dentistry and continues to educate his peers and patients for the optimal patient experience. His numerous accolades are a testament of his dedication and Sacramento Magazine just announced Miyasaki Dental as a "Top Dentist" and "The Face of Lifetime Dental Health."



Scan to learn more about our irrigation solutions

Conventional Irrigation

The standard protocol for tissue dissolution, smear layer removal, and pristine cleanliness.



Step 1**:



During instrumentation and the initial irrigation, use Vista Apex 3% (SKU 317018) or 6% (SKU 317008) Sodium Hypochlorite.



Recommendation:

- Use 6% Sodium Hypochlorite to speed tissue dissolution.
- Use a Luer-Lock Bottle Cap (SKU 317004) to eliminate waste and mess.

Step 2**:



Remove the smear layer with Vista Apex 17% EDTA (SKU 317011).



Recommendation:

- Irrigate with at least 6mL* of EDTA to properly remove the smear layer.

Step 3:



Rinse with sterile water or alcohol.



Recommendation:

- Use the Stropko™ Irrigator (2", SKU 315260; 3.5", SKU 315265) in your air/water syringe to control the surgical field during rinsing and drying.

Step 4:



Rinse with Vista Apex 3% (SKU 317018) or 6% (SKU 317008) Sodium Hypochlorite and/or CHX-Plus™ (SKU 503900).



Recommendation:

- Irrigate with at least 6mL* of Sodium Hypochlorite or CHX-Plus™ to ensure pristine cleanliness.

Enhanced Solutions Irrigation

Save steps and valuable chair time by using our premium irrigants.



Step 1**:



During instrumentation and the initial irrigation, use Vista Apex Chlor-XTRA™ (SKU 503800), a 6% Sodium Hypochlorite solution with surface modifiers and wetting agents.



Recommendation:

- Use Chlor-XTRA™ during instrumentation.
- Irrigate canal with 10mL* of Chlor-XTRA™.

Step 2**:



Remove the smear layer and ensure pristine cleanliness with Vista Apex SmearOFF™ 2-in-1 EDTA + CHX irrigant (SKU 317111).

A rinse step is NOT required prior to delivering SmearOFF™.



Recommendation:

- Irrigate canal with at least 6mL* of SmearOFF™ to properly remove the smear layer and provide pristine cleanliness.

Step 3:



Rinse with sterile water or alcohol.



Recommendation:

- Use the Stropko™ Irrigator (2", SKU 315260; 3.5", SKU 315265) in your air/water syringe to control the surgical field during rinsing and drying.

* Total volume of irrigant can vary based on shape and anatomy of the canal.



See Activation

** Activation of the irrigants in Steps 1 and 2 of both protocols for 30 seconds can increase irrigation efficacy significantly.

ACTIVATION

At the end of Steps 1 and 2 in both protocols, we recommend activating with the EndoUltra® for 30 seconds:



EndoUltra® Cordless Ultrasonic Activator:

(SKU 407702) can be used with all irrigation solutions to increase their effectiveness, improve their efficiency and speed up the overall process.

IRRIGATING TIPS

There is a wide selection of tips that can be used to irrigate:



Voyager Irrigating Tips (50ct):

DUAL SIDE PORT: 27ga, 17mm (SKU 315727), 27ga, 27mm (SKU 315827), 29ga, 17mm (SKU 315729), 29ga, 27mm (SKU 315829), 30ga, 17mm (SKU 315730), 30ga, 27mm (SKU 315830), 31ga, 17mm (SKU 315731), 31ga, 27mm (SKU 315831);
BLUNT END: 29ga, 17mm (SKU 315929), 29ga, 27mm (SKU 316929)



Flexi-Glide™ Utility Tips with polyamide, flexible end (50ct):

30ga (SKU 406350)



NiTi SuperFlex™ Endodontic Tip with NiTi, flexible end (6ct):

30ga Short 17mm (SKU 405107), 30ga Long 25mm (SKU 405108)

RINSING / DRYING / EVACUATION

When rinsing or drying the canal the following are extremely useful:



Stropko™ Irrigator:

2" (SKU 315260), 3.5" (SKU 315265) with any luer tip (we recommend Appli-Vac™ 3/4" Bendable Tips)



Appli-Vac™ 3/4" Bendable Tips (100ct):

16ga (SKU 315116), 18ga (SKU 315118), 19ga (SKU 315119), 20ga (SKU 315120), 22ga (SKU 315122) or 25ga (SKU 315125)



Elasti-Vac™ Evacuation Tip:

(SKU 406150)



Micro Aspirators:

18ga (SKU 315258), 20ga (SKU 315252) or 25ga (SKU 315255)

SYRINGES

Our tips can be applied to any of the following standard luer-lock syringes:



6mL Dripless Syringe (100ct):

(SKU 318060) Vista Apex offers a patented dripless syringe that holds the final drop, eliminating any staining or drops that could cause injury.



Standard Clear Luer-Lock Syringes (100ct):

1.2mL (SKU 316002), 3mL (SKU 316030), 6mL (SKU 316060) or 12mL (SKU 306012)



Colored Luer-Lock Syringes (80ct):

Red, Blue, Yellow and White (to distinguish between solutions): 3mL (SKU 317158-317161) and 12mL (SKU 317058-317061)