

# SYNAPSE

DENTAL PAIN ERASER



## NEW WAVE OF PAIN MANAGEMENT

Immediate • Drug-free • Affordable • Portable • User-friendly

## Clinical Scenario-Based Instructions

[www.dentalpaineraser.com](http://www.dentalpaineraser.com)

# DENTAL PAIN ERASER

The patented, proven delivery method for dental pain relief

The Dental Pain Eraser is a NEW pen-shaped, sub-sensory, electrical Pulse-Wave device that will provide a new “wave” of how we deliver care in the dental field. Offering patients, an immediate, drug-free manner of pain relief, and improved comfort of oral care delivery will **revolutionize how you practice**, and usher in an **exciting new age of in-office and at-home oral care**.

The Dental Pain Eraser has even been called “magical” in its ability to **make appointments more efficient**, reducing costs by reducing the length of appointments or number of appointments needed for a procedure, reducing the cost of having and using many products that used for topical anesthesia or dental thermal hypersensitivity or general soft tissue/dental pain, and increasing safety of procedures by making the clinical field of use safer (for example clinician’s use of sharp instruments with slippery gels, topical and other modes of pain relief and glove use). Most importantly, the Dental Pain Eraser has **increased patient satisfaction**, reversing the common correlation of our field with pain.

The Dental Pain Eraser is a device that once the clinician diagnoses the point of discomfort, and understands the underlying anatomic pathway, they are able to deliver a noninvasive, safe and effective sub-sensory Pulse-Wave to the site of discomfort. Our sensory nerve endings are so acute, and in large number in the oral cavity, that once the clinician begins to use the concepts of “cascade blocking” and direct nerve blocking, they will truly appreciate the invaluable use of the Dental Pain Eraser.

Understanding “cascade blocking” and direct nerve blocking is critical. Once the clinician blocks a certain segment of nerves designed to detect a pain event, they block the cascade of exponential other nerves or biological processes down the communication path that are signaled to assist in “firing up” the response.

This is in combination with a new understanding of the complex anatomic sensory response of odontoblasts, pulpal sensory communication, vascular/nerve interwoven framework and central nerve adaptation, has opened a new realm of providing patients with an **incredible, positive, and comfortable in office experience**, and a new way of managing pain at home.

Welcome to the Dental Pain Eraser, the **New Wave of Pain Management!**

# HYGIENE CLEANING AND PERIODONTAL DEBRIDEMENT

Use at cleaning appointments (scaling, root planing, ultrasonic scaling) or in day to day dental pain scenarios (cold pain/tooth pain/cracked tooth diagnostics, canker sores and others) to make treatment in the office pain free. The Dental Pain Eraser provides a new non-pharmacologic tool that will speed up appointment time/efficiency, improve patient satisfaction and still allow for re-imburement.

## CASE OBSERVATION

A patient with severe sensitivity comes in for an appointment after not being seen for several years. The patient usually requires local or topical anesthetic use to complete debridement and cleaning.

- 1 Cover the Dental Pain Eraser (DPE) with a dental sleeve (sleeve is not provided in device package) and expose only the 2 probe ends. If the device will be prescribed to the patient for take home use, there is no need for dental sleeve coverage as the DPE is designed for home/health use and cleaning similar to a toothbrush.
- 2 Turn the device on by pressing the on button. You will see a blue light that will stay on for 1 second. This means the device is now powered ON.
- 3 (Once the blue light starts blinking, the device is ready to use) Pre-apply the sub-sensory probe tips along the gingival and mucosa along the whole root surface for around 10 seconds per tooth starting on the buccal going around the buccal/ facial. Using slow light contact, move the probes up and down the whole root surface visualizing as you are “erasing” every part of the root surface vertically and side to side.  
  
A good analogy is think of painting a pole with slow smooth motions not missing painting any areas, similarly applying to all the root surface.
- 4 Continue to the lingual for 10 seconds per tooth along the gingival and up/ down root surface of each tooth (20 seconds total per tooth).
- 5 Ask the patient to bite gently, or **apply light air/water to the tooth** and rate the level of pain or pain relief and if there any areas that need more attention. Reapply as needed to any additional areas or over the existing areas for a second round until the patient experiences relief.  
  
*Pain is titratable, meaning that several teeth may require reapplication due to hypersensitivity and with re-application, over 96% of patients have shown significant pain relief.*
- 6 Turn off the device by holding the power button for 2 seconds. The blue light will blink three times meaning the device is powering OFF.
- 7 Discard the dental sleeve used on the device for treatment, clean device, and put the protective cap (provided in package) back on device. Store device in packaging box.

Use of the Dental Pain Eraser has increased the safety of scaling and root planing with sharp instruments by reducing the need for gel compounds on gloves that can lead to a possibility of an accident stick incident.

# TOOTH PAIN/MINOR CARIES CONTROL

Tooth pain related to minor operative procedures that are radiographically limited in dentinal depth or incipient/minimal caries, chipped/broken tooth edge or cusp, post-operatives sensitivity (reversible pulpitis) following restorative procedures.

## CASE OBSERVATION

A patient presents with a Class V caries lesion on the upper right premolar and is experiencing pain during chewing due to missing portion of amalgam restoration on the adjacent first molar causing sensitivity to air/cold water that goes away quickly.

- 1 Cover the Dental Pain Eraser (DPE) with a dental sleeve (this sleeve is not provided in the package with the device) and expose only the 2 probe ends. In cases that the device will be prescribed to the patient for take home use, there will be no need for the dental sleeve coverage as the DPE is designed for home/health use and cleaning similar to a toothbrush.
- 2 Turn the device on by pressing the on button. You will see a blue light that will stay on for 1 second. This means the device is now powered ON.
- 3 (Once the blue light starts blinking, the device is ready to use) Dental hypersensitivity to cold water and air due to broken restoration and cusp tip, leaving dentin, will require application of the Dental Pain Eraser directly on intact enamel or dentin surface. Place the two metal probes at the midpoint of buccal surface of the posterior teeth or the mid-facial surface of the anterior teeth. **Apply the Pulse-Wave for 20 seconds per tooth** to ensure blocking pulpal pain signaling fibers.

**Special note:** Ensure you are on natural tooth surface. Large restorations will affect the ability to transmit pain blocking potential to pulpal nerves. Envision how to apply signal on tooth to avoid blocked signal effect (Place more gingivally or on cusp not affected by restoration).

If there are large restorations, or there is poor conduction in the tooth, place the two metal probes on the area of gum tissue (gingival attachment) visualizing the roots of the teeth you are trying to relieve the pain. Using slow light contact, move the probes up and down the whole root surface visualizing as you are “erasing” every part of the root surface vertically and side to side.

Clearly apply to full length of root surface buccal and lingual for 30 seconds like painting a pole.

A good analogy is think of painting a pole with slow smooth motions not missing painting any areas, similarly applying to all the root surface.

4 Move to the next tooth that may be experiencing discomfort and apply the pain “erasing” in the same manner. Dental hypersensitivity is sometime regional and clinical evaluation/ parameters will be used the same for each tooth that is affected. The procedure will be more fluid and quick once the clinician is aware of time needed to block the sensitivity on the first tooth.

- a. For the tooth with **fractured cusp** or **missing tooth structure**, perform needed restorative treatment.
- b. On the tooth needing **caries control** of the Class V, after completing the first 3 steps, apply the Dental Pain Eraser probe end as a retractor for the tongue or lip, keeping the probe tip in contact with the tooth enamel or dentin surface, while using the rotary high speed instrument for caries removal.

Tooth selection is critical as teeth with large restorations may not allow the Pulse-Wave nerve blocking potential of the Dental Pain Eraser to work on the pulp.

5 Ask the patient to bite gently, or **apply light air/water to the tooth** and rate the level of pain or pain relief and if there any areas that need more attention. Reapply as needed to any additional areas or over the existing areas for a second round until the patient experiences relief.

*Pain is titratable, meaning that several teeth may require reapplication due to hypersensitivity and with re-application, over 96% of patients have shown significant pain relief. Please note in patient that are experiencing severe pain or irreversible pulpitis, it has been clinically shown to reduce pain but may require application times on the root surface or tooth of up to 4-5 minutes per tooth affected.*

6 Turn off the device by holding the power button for 2 seconds. The blue light will blink three times meaning the device is powering OFF.

7 Discard of the dental sleeve used on the device for treatment, clean the device, and put the protective cap (provided in package) back on the device. Store the device in packaging box.

The Dental Pain Eraser has been shown to be effective in minor caries control, and in not intended for deep caries removal that is close to or has pulpal involvement. It is to be used as an adjunct to assist in providing a **fast needle free alternative** to minor caries control and restoring vital teeth with limited carious involvement, included filling replacement, broken cusp, or tooth repair.

# DENTAL HYPERSENSITIVITY (RECESSION/THERMAL SENSITIVITY)

Tooth Pain related to orthodontic de-bonding (high speed air use), tooth sensitivity during dental procedures (air/water sensitivity of exposed dentin structure), scaling and ultrasonic cleaning appointments, periodontal procedures with root sensitivity/soft tissue sensitivity related to orthodontic debonding.

## CASE OBSERVATION

Case 1: Recession – Patient is experiencing sensitivity to cold during ultrasonic scaling due to moderate generalized recession.

Case 2: Orthodontic Debonding Pain – Pressure related to physical removal of bands and brackets and cold water and air sensitivity during polishing procedure of the complete dentition.

- 1 Cover the Dental Pain Eraser (DPE) with a dental sleeve (this sleeve is not provided in the package with the device) and expose only the 2 probe ends.
- 2 Turn the device on by pressing the on button. You will see a blue light that will stay on for 1 second, this means the device is now powered ON.
- 3 (Once the blue light starts blinking, the device is ready to use) Place the two metal probes on the tooth surface with intact enamel or natural tooth surface. It is recommended that the buccal/facial surface at midpoint be used in the anterior and the largest posterior cusp with natural tooth surface present. **Apply 20 seconds per tooth** to ensure blocking pulpal pain signaling fibers.

**Special note:** Ensure you are on natural tooth surface. Large restorations will affect the ability to transmit pain blocking potential to pulpal nerves. Envision how to apply signal on tooth to avoid blocked signal effect (Place more gingivally or on cusp not affected by restoration).

In some cases you will need to apply the Pulse-Wave and probe tips directly on the root surface to communicate with the neural network via the periodontal ligament and supporting structure.

Place the two metal probes on the area of gum tissue (gingival attachment) visualizing the roots of the teeth you are trying to relieve the pain.

Using slow light contact, move the probes up and down the whole root surface visualizing as you are “erasing” every part of the root surface vertically and side to side. Apply the 2 probe tips for 30 seconds on the buccal and the lingual root surface of the tooth.

A good analogy is think of painting a pole with slow smooth motions not missing painting any areas, similarly applying to all the root surface.

**Orthodontic Debonding:** Buccal and lingual application of probes 30 seconds, most recession is only buccal for 30 seconds.

4 Move to the next tooth that may be experiencing discomfort and apply the pain “erasing” in the same manner. Dental hypersensitivity is sometime regional and clinical evaluation/ parameters will be used the same for each tooth that is affected. The procedure will be more fluid and quick once the clinician is aware of time needed to block the sensitivity on the first tooth.

5 Ask the patient to bite gently and rate the level of pain or pain relief and if there any areas that need more attention. Reapply as needed to any additional areas or over the existing areas for a second round until the patient experiences relief.

*Pain is titratable, meaning that several teeth may require reapplication due to hypersensitivity and with re-application, over 96% of patients have shown significant pain relief.*

6 Turn off the device by holding the power button for 2 seconds. The blue light will blink three times meaning the device is powering OFF.

7 Discard of the dental sleeve used on the device for treatment, clean the device, and put the protective cap (provided in package) back on the device. Store the device in packaging box.

# CANKER SORE-APHTHOUS ULCER

## CASE OBSERVATION

A patient has complained of mouth pain due to a canker sore on the inside of their lower lip.

- 1 Cover the device with a dental sleeve (this sleeve is not provided in the package with the device).
- 2 Turn the device on. You will see a blue light that will stay on for 1 second, this means the device is now powered ON.
- 3 (Once the blue light starts blinking, the device is ready to use) Apply the two metal probes on the area around the canker sore using circular slow motion for 20-30 seconds ensuring that you do not touch the inflamed sore part (outside defined canker sore margin) and staying on intact tissue.  
  
If the patient does not feel the pain start to go away, continue applying the device in the same circular manner for an additional 20 seconds. It has been clinically shown to relieve pain in 96% of patients with canker sore.
- 4 Turn off the device by holding the power button for 2 seconds. The blue light will blink three times meaning the device is powering OFF.
- 5 Discard of the dental sleeve used on the device for treatment, clean the device, and put the protective cap (provided in package) back on the device. Store device in packaging box.

The same technique is used for **abrasion** in the oral cavity due to sore created by an orthodontic appliance or denture.

# ORTHODONTIC PAIN

## CASE OBSERVATION

A patient presents to the office the day after placement of orthodontic appliance insert with the chief concern of tooth pain related to the pressure of the braces preventing them from sleeping, eating or being able to go to work.

1 Cover the Dental Pain Eraser (DPE) with a dental sleeve (this sleeve is not provided in the package with the device) and expose only the 2 probe ends.

2 Turn the device on by pressing the on button. You will see a blue light that will stay on for 1 second, this means the device is now powered ON.

3 (Once the blue light starts blinking, the device is ready to use) Place the two metal probes on the area of gum tissue (gingival attachment) visualizing the roots of the teeth you are trying to relieve the pain.

Using slow light contact, move the probes up and down the whole root surface visualizing as you are “erasing” every part of the root surface vertically and side to side.

A good analogy is think of painting a pole with slow smooth motions not missing painting any areas, similarly applying to all the root surface.

Clinically it has been shown that you only need to do the front side (labial/buccal) of the tooth, but if the tooth pain is on the back tooth (molar), it may be necessary to do the back side (lingual/palatal) of root also. On average it takes about 10 seconds per tooth.

4 Move to the next tooth that may be experiencing discomfort and apply the pain “erasing” in the same manner. Orthodontic pain is related to “areas” of pain and there are usually several teeth together in the area.

5 Ask the patient to bite gently and rate the level of pain or pain relief and if there are any areas that need more attention. Reapply as needed to any additional areas or over the existing areas for a second round until the patient experiences relief.

*Pain is titratable, meaning that several teeth may require reapplication due to hypersensitivity and with re-application, over 96% of patients have shown significant pain relief.*

6 Turn off the device by holding the power button for 2 seconds. The blue light will blink three times meaning the device is powering OFF.

7 Discard of the dental sleeve used on the device for treatment, clean the device, and put the protective cap (provided in package) back on the device. Store the device in packaging box.

# PORTABLE TAKE HOME UNIT RECOMMENDATIONS

Management of Post operative sensitivity (reversible pulpitis), following restorative procedures (deep cavities, crown in vital teeth) irreversible pulpitis (management of pain in tooth until sees the specialist for extraction/endodontic treatment), post-endodontic procedures, gingivectomy, frenectomy, following oral surgery, post implant placement pain, bone placement and extraction pain.

## CASE OBSERVATION

If the Dental Pain Eraser is provided for TAKE HOME use for the management of pain, careful review of application instructions dependent on the procedure performed is recommended.

**1** Example: If pain will be experienced following a filling replacement, application to the tooth surface alone may be adequate with a backup understanding applying a slow light contact of the 2 probes on the buccal root surface, going up and down the root surface vertically and side to side.

A good analogy is thinking of painting a pole with a slow smooth motion not missing any areas.

Follow the time indications for each procedure, but a general rule of thumb is 30 seconds directly to the enamel surface or 30 seconds on the root surface.

**2** Note: Patients that are experiencing irreversible pulpitis, in has been clinically shown to reduce pain but may require application times on the root surface and tooth up to 4-5 minutes per tooth.

**3** Recommendation: It is not recommended to exceed 10 minutes per tooth of application and it is recommended that the patient seek direct provider attention.

The Dental Pain Eraser is recommended for TEMPORARY relief of pain in irreversible pulpitis or infection of the dentin/pulp or soft tissue. Patients should seek direct supervision and recommendations of the dentist or physician.

# DENTAL PAIN ERASER

## The future of dental pain relief in the palm of your hands

The design and application of the Dental Pain Eraser is easy to integrate and once you master how to use it in specific areas of dental or soft tissue pain, simply grab it from the chair-side cradle, apply a new probe tip, slide on the disposable custom fit barrier, and apply it to the area of pain similar to grabbing a curing light.

### **PATIENTS, HYGIENISTS, DENTISTS, AND ORTHODONTISTS PRAISE THE DENTAL PAIN ERASER**

“A game changer in patient experience.”

“This changes the status quo of orthodontic treatment and pain.”

“Pain went from a solid 8 to a 1.”

“All my pain went away.”

“DPE works extremely well as an alternative to local for patients.”

“This new patient has not seen a dentist in over 20 years because of her extreme, extreme fear of pain. Once she used the DPE, Renee was actually able to scale and root plane her whole mouth on one visit which is a first for her. I am really impressed!! The response from the patient was incredible. She had tears in her eyes at the front desk and said she is so happy she chose to come here, we are so gentle.”

