

Pain Management for Patients with Moderate to Severe Gingivitis

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FOREWORD

According to the Centers for Disease Control (CDC), nearly half (46%) of all adults over the age of 30 show signs of gum disease, with severe gum disease prevalent in 9% of these adults.¹ With moderate to severe gingivitis, tissues can become swollen, red and edematous. In the more serious form of disease, called periodontitis, the gingival tissues begin pulling away from the tooth and signs of bone loss are apparent. The CDC reported in 2013 that periodontitis is still one of the biggest threats to dental health in the United States.²

Gingivitis is often silent, meaning that symptoms may not appear until the advanced stages. Consequently, due to the severity of these gingival diseases, patients experience pain.³ A 2015 survey by the American Dental Association found that 29% of adults have experienced pain associated with gingivitis within that year.⁴



CHALLENGE: Managing Pain in a Timely and Cost-Efficient Manner

Due to the complexities of care that accompany moderate to severe gingivitis, managing a patient's pain during dental appointments can be difficult. There are a variety of different pain management modalities available, all with their own characteristics dependent on the type of anesthesia needed. Increasingly, patients and clinicians also desire anesthetic options that are fast-acting, efficient, needle-free and easy-to-use.

Patients who have moderate to severe gingivitis often experience discomfort associated with the disease, which can make thorough instrumentation difficult. For proper biofilm removal, clinicians need to be able to instrument below the gumline. Maintaining patient comfort during this sub-gingival debridement is challenging if patients are experiencing pain.

Proper pain management is imperative. It allows the clinician more efficient access for removal of sub-gingival bacteria, and also for the patient to be pain-free during appointments. This builds trust between the patient and clinician. In addition, some patients' anxiety makes them fearful of pain which inadvertently keeps them from maintaining regular dental care, which only further contributes to the progression of their disease.





Dental professionals need to find a delicate balance between maintaining patient comfort and appointment efficiency. Pre-procedural pain management can be time-consuming in an already demanding clinical schedule. This delicate juggle can be facilitated by using the appropriate anesthesia for pain management, especially for those patients suffering from moderate to severe gingivitis. Often, these patients need an anesthetic option that will effectively eliminate their pain during instrumentation, and the clinicians need an anesthetic option that can deliver optimal comfort in an efficient, easy-to-use manner.

Increasingly, other non-injectable anesthetic options readily available are not the most efficient option for managing a patient's pain. Often, these sub-gingival gels and liquids require site-specific delivery which is time-consuming and can be costly to administer.



SOLUTION: Perio Vance Oral Rinse

Perio Vance Oral Rinse delivers effective pain relief and appointment efficiency for clinicians. This oral rinse is an easy-to-administer, full-mouth anesthetic that is needle-free, alcohol-free, all-natural and delivered with a single 60-second swish. It is used to treat pain associated with a variety of oral conditions, such as moderate to severe gingivitis, periodontitis and other oral lesions. Its unique blend of benzocaine, maltodextrin and aloe-vera bind to pain receptors for a complete combination of pain relief and comfort.

The table below outlines the reasons Perio Vance Oral Rinse is an effective pain management solution for your patients suffering from moderate to severe gingivitis.

REASONS	PERIOVANCE ORAL RINSE	LIDOCAINE/ PRILOCAINE GEL	TOPICAL ANESTHETIC LIQUID
PATIENT SATISFACTION	Easy to use, pleasant citrus taste, soothing	Bitter taste	Bitter, difficult to manage flow
SUPPLIES NEEDED	One bottle & dosage cup	Autoclavable manufacturer-specific syringe & tips	Manufacture specific syringe & canula
LOWER COST PER APPLICATION	\$1.99 or \$0.13/ml	\$6/carpule quadrant \$24 full-mouth	\$1.50/quadrant \$6.00 full-mouth
MORE QUADRANTS TREATED W/ ONE	Full-mouth application	Site specific	Site specific
FACILITATES YOUR WORK WITH LESS INTERRUPTION	Efficient	Time-consuming	Time-consuming
EASIER APPLICATION	Full-mouth anesthetic	Site specific	Site specific w/dosage limitations
LONGER-LASTING	Up to 2 hours per application	Up to 20 minutes	30-60 minutes

To summarize, Perio Vance Oral Rinse:

- Increases appointment efficiency.
- Lessens chair-time waiting for anesthetic effects from local anesthesia.
- Delivers pain relief so that clinicians can remove sub-gingival biofilm thoroughly.
- Improves overall patient care and pain management.
- Increases revenue for rinse sales to patient for at-home use.
- Delivers pain relief for patients at home who suffer from painful oral conditions.
- Does all this at just \$1.99/patient use – highly competitive against other oral anesthetics.



RESULTS AND PROOF POINTS

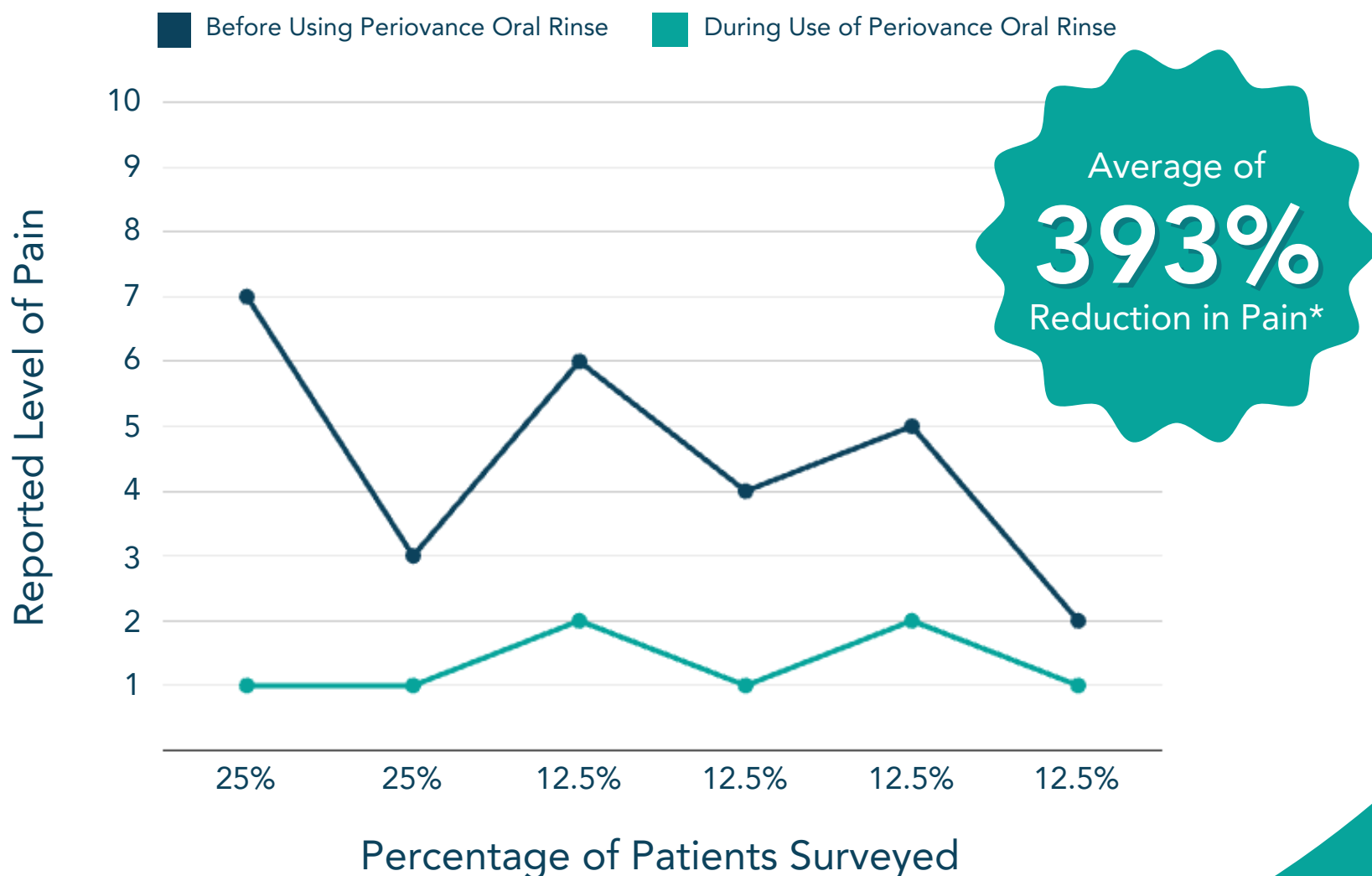
Recently, a controlled study was conducted utilizing patients selected at clinician discretion, based solely on their assessment of gingival conditions and disease associated with moderate to severe gingivitis.

For this case study, two independent dental hygienists completed the patient selection. These patients were in no way solicited by OraBio, Inc. for the purpose of this study. Each patient gave their verbal consent to use the product for pain management during instrumentation and for their clinician to record the results. Each patient was between the ages of 18-99 with no bias to sex or ethnicity. Each patient was instructed to swish with 1 tablespoon of Perioavance Oral Rinse for 60-seconds to obtain necessary anesthesia.

Both study's clinical results and in-depth patient interviews post-treatment showed that all patients remained comfortable during debridement (25% of patients required an additional rinse during their appointment to maintain comfort). All patients report the rinse was easy-to-use and effective for the management of their gingival pain during instrumentation. All patients reported that they would use the rinse again at subsequent appointments.

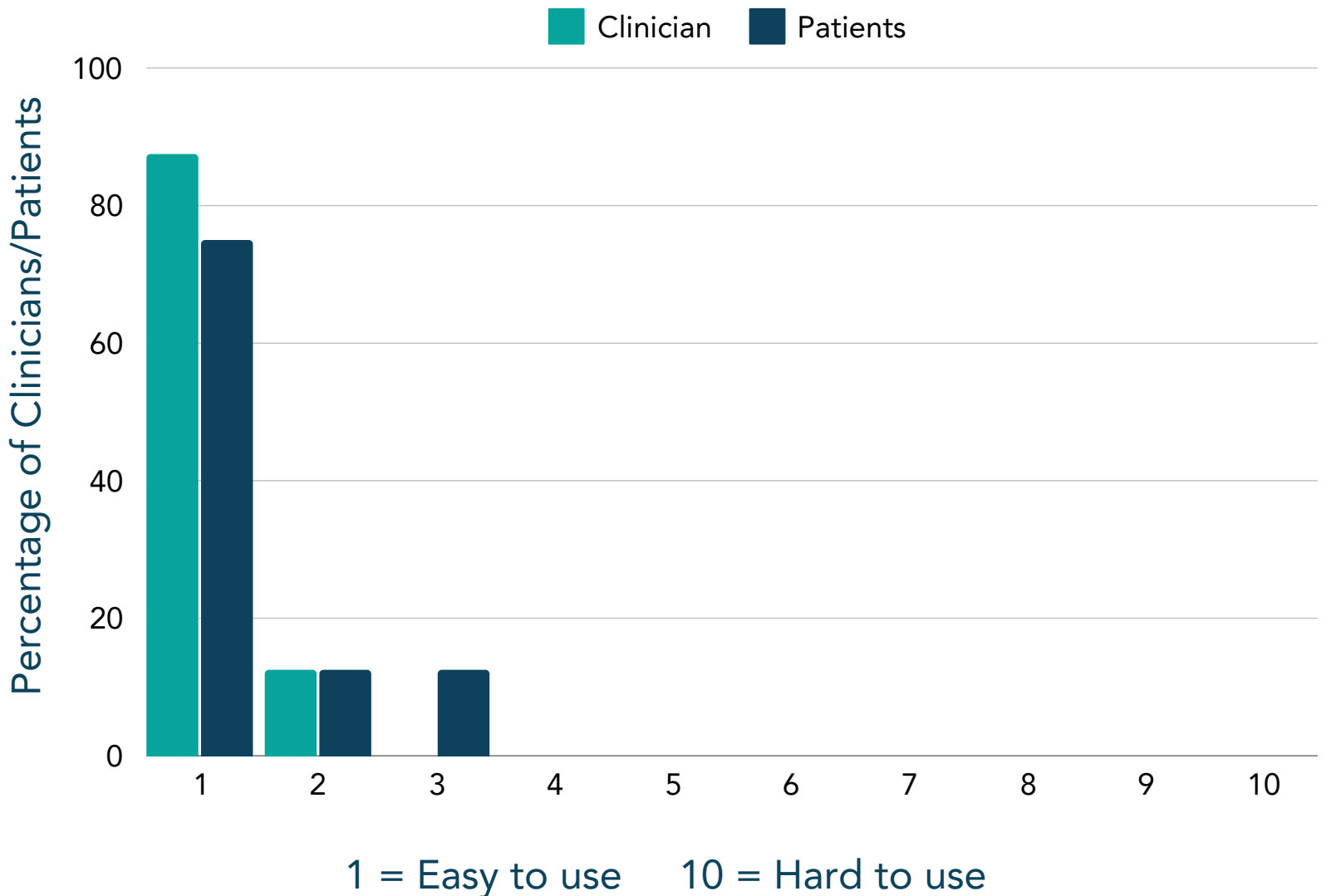


Patients were asked to rate their perceived pain level before and during the use of Perioavance Oral Rinse on a scale of 1 to 10, with 1 representing "no pain" and 10 representing "intense pain." Their reported levels of pain are reflected below.



*Of 8 patients surveyed

Also of note, patients and dental hygienists offered encouraging feedback regarding how easy the rinse was to use. Please refer to the graph below outlining these details.



The findings of the study clearly support that PerioVance Oral Rinse is effective at reducing pain associated with moderate to severe gingivitis. Furthermore, all patients in the study would welcome using the product at subsequent visits and felt the rinse was easy to use.

PerioVance Oral Rinse is easily integrated into current treatment protocols for pain management and allows for increased efficiency for the clinician as it streamlines patient care. It can be used before, during or after treatment to extend comfort for take-home use.

STUDY TESTIMONIALS

Testimonial #1: Patient had no concerns with the taste or viscosity and felt the product was easy to use.

Testimonial #2: Patient reports the taste and texture was pleasant and not medicinal tasting.

Testimonial #3: Patient reports that the rinse was neutral tasting and did not notice much citrus flavor. Patient notes the rinse was thicker, but not unpleasant.

Testimonial #4: Patient reported on the thick texture and mild difficulty swishing but stated almost immediate numbness without an unpleasant taste.

Testimonial #5: Patient stated rather thick viscosity but had no aversion to the flavor and felt numbness quickly.

REFERENCES

1. Oral Health in Adults. (December 2020). Centers for Disease Control and Prevention (CDC). Date fetched: January 31, 2024.
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4. Oral Health & Well-Being in the United States. Health Policy Institute (HPI). Date fetched: January 31, 2024.