

The following VibraJect® excerpts are from the article entitled:

## **Dermal Anesthesia Products for the Needle-Phobic Patient**

Dermal Anesthesia Products for the Needle-Phobic Patient by The Needle Phobia Information Center (NPIC) D. Keith Lamb, founder-  
(8/15/09) Trademarks owned by representative firms indicated

### **VIBRAJECT® Dental syringe gate-theory vibrator**

The Needle Phobia Information Center is proud to provide its readers with an update on the following products introduced to the market for helping Needle-Phobes suffering from pain concerns associated with medical procedures.

*This paper will review the following relatively new products:*

VibraJect dental injection pain management system by VibraJect

Ethyl Chloride, Pain Ease and other vapocoolant dermal anesthesia products by The Gebauer Co.

Lidosite Iontophoretic dermal anesthesia system, by Vyteris

Background: As the NPIC has pointed out, 10% of all needle-phobes have developed needle phobia due to fear of pain associated with medical procedures including needle procedures. For those suffering from this form of needle phobia, dermal (skin) anesthesia is an effective treatment. Historically, the value (need) of dermal anesthesia (especially beginning in childhood) in painful invasive medical/dental procedures has not been recognized by the health care industry.

It is astonishing how many physicians and dentists simply do not believe that procedural pain is something that warrants prophylactic treatment. Informal inquiry by the NPIC with many dozens of physicians and dentists has repeatedly shown the following views of procedural pain:

- is not ‘a big deal’
- is not significant because I [the needle procedure provider] am so good at it [providing pain-free needle procedures]. This view is common among dentists and nurses
- is something the patient should just ‘get over’
- treatment is not worth the risks and costs

The lack of recognition of the need for dermal anesthesia together with concerns over cost, reimbursement, and perceived delays in rendering treatment have all combined to keep dermal anesthesia beneath the health care radar.

Fortunately, these views are changing. Several progressive companies have been working beneath the radar, some for many years, on this vitally important and underserved market. The NPIC is proud to help by trying to elevate these companies and their products above the radar.

If patients and their loved ones become knowledgeable about these products, they can bring this information to their health care workers. Sometimes physician's lack of care and concern over procedural pain stem simply from a lack of knowledge. The NPIC has changed many obsolete opinions in this area by simply providing medical literature to physicians on the subject and potential treatments. In other cases, patient pressure may need to be applied.

### **VIBRAJECT® Dental syringe gate-theory vibrator**

Description: The VibraJect device is a very interesting implementation of the Gate Theory - it reduces pain from dreaded dental injections by vibration. It is a miniature vibrator that snaps onto a dental syringe. The intense vibration overwhelms the patient's nerves and therefore 'distracts' the brain from perceiving the lower-intensity signals coming from pain nerves. The patient feels vibration rather than pain.

The VibraJect system is not a substitute for dental local anesthesia injections. Rather, it helps the patient tolerate anesthetic injections. Many needle-phobes will tell you that they fear the pain of dental injections more than dental procedure pain. The VibraJect system was developed to solve this dilemma.

The VibraJect system consists of the vibrator, a set of rechargeable batteries, a battery charger and printed instructions.

Review: the first thing you notice when you turn on the VibraJect is just how intense a vibration that this tiny little device can generate. WOW! Its immediately easy to see how it works. The manufacturer claims (backed up by clinical studies) that the device offers more pain blocking than dermal anesthetic paste which is the current standard-of-care.

When we first tried it we ran into our first problem - the dentist said that his technique is so good that such a device is simply not necessary. Overcoming such professional arrogance is a big challenge facing the manufacturer of this product.

"I insist" said Keith Lamb, the NPIC director. Mr. Lamb is admittedly hyperalgesic (unusually pain sensitive) so it was difficult to overcome the perception of the needle pain. Still, the manufacturer's claim that it is as good as anesthesia paste seems to hold true. The super-intense vibration of the needle in one's gum is a bit hard to get used to. The last thing patients want to feel is someone moving the needle around...that is, except pain.

The VibraJect system does what it says it does. Given how fearful we all are of dental

injection pain, give us topical paste AND VibraJect AND very very slow technique. Bring it on, Dr. Dentist, we want it all.

Cost and Availability: the VibraJect system is marketed toward dentists, not patients. Therefore it suffers from the most common problem that needle-phobes face when it comes to anesthesia - availability. You can't simply buy one from a pharmacy or over the internet. If you want this treatment, you will need to ask your dentist. If enough patients ask (demand?) it, perhaps it will become a standard treatment.

To the VibraJect manufacturer - we'd like to see a way that a patient can buy this (from your web site?) and carry it with him to the dentist office, preferably without a prescription but even a prescription requirement is acceptable to us. The patient can then tell the dentist that they must use this device. Just knowing that the patient can control this feared aspect of the dental visit can bring them a great sense of relief even before the needles come out.

The system costs only a couple of hundred dollars, spare change when you compare it to other tools in a modern dental office. And since it can be used on patient after patient and it employs rechargeable batteries, its cost per application is nil. It doesn't appreciably slow down dental procedures and its easy to use requiring virtually no training.

**Summary:** The VibraJect system is a quick and effective non-drug topical dental anesthesia device that requires virtually no training.

The NPIC would like to see this become a standard-of-care in dental offices.