PEMF Therapy for Dental Applications

Needless to say, prevention is any day better than cure and this statement holds good especially when it comes to dental problems. And sometimes, despite paying regular visits to dentists, people still continue to suffer from several dental and periodontal issues.

Not only are some dental procedures extremely painful and uncomfortable, but aren't worth going through sometimes, since the issues remain unsolved.

This calls for a holistic treatment approach and Pulsed electromagnetic field therapy appears nothing but promising in dental applications. In holistic treatment approaches, acupuncture has been used to cope with dental pain.

Magnets placed above acupuncture points have a gentle stimulation action similar to that of acupuncture needles. You can stimulate an acupuncture point in several ways – using pressure, friction, electrostimulation, heat, ice, lasers, light, and Magnets!

Acupuncture has been touted for centuries in pain management, especially during dental procedures. Acupuncture needles have been used alongside electrostimulation to produce an analgesic effect.

Did you know that your teeth, gums, and jawbone are placed right on acupuncture meridians? This might explain why an imbalance in these body parts is linked to ailments of other organs. And PEMF's ability in enhancing micro-circulation and promoting bone growth can do wonders when you have to cope with dental pain.

Even though the underlying mechanisms aren't fully understood, Pulsed Electromagnetic fields have long been known to be effective on bone, osteoblasts, and their metabolism.

Coping with dental pain

A toothache or tooth pain occurs when the nerve in your tooth's root might get irritated. The common causes of dental pain include infection, decaying, injuries, or loss of a tooth.

Toothache symptoms include pain with chewing, hot/cold sensitivity, discharge or bleeding around teeth or gums, swollen jaws, and/or injury or trauma.

Dental pain sometimes might originate from different areas and radiate towards the jaw and disguise to be tooth pain. For example, ear pain, sinuses, temporomandibular joint, and sometimes, even heart problems can appear like dental pain.

Pathogenic bacteria which grow inside your oral cavity plays a crucial role in gum diseases and dental decay. Both of these could result in severe dental pain. While most of these dental health issues can be prevented by following good oral hygiene practices including brushing, flossing, using fluoride toothpaste, and more importantly, getting your teeth professionally cleaned at least two times every year.

Although there are several effective treatment options for dental health problems when preventative measures fail, some people find visiting their dentists as an unpleasant experience.

For some people, the very thought of going to the dentists' office might cause severe anxiety, which might result in worsening of their dental symptoms, entering a vicious cycle of pain, worsened anxiety, and a need for complex dental procedures.

Now, this is when alternative medicine like PEMF therapy can help with chronic pain. Pulsed electromagnetic field therapy helps relieve dental pain in the long term by the two most effective ways: reducing inflammation and repairing the traumatized parts of the oral cavity.

Using pulsed electromagnetic field devices, PEMF therapists help reduce inflammation and increase circulation in the capillaries and arteries in order to speed up the healing process.

Scientific research on PEMF and dental implants

Research studies have demonstrated that PEMF therapy can promote bone formation surrounding dental implants significantly. There is evidence that PEMF improves the healing of dental implants inserted into the extraction sites as well.

Pulsed electromagnetic field therapy appears promising in improving and accelerating bone regeneration in a wide range of clinical areas, especially dentistry.

However, due to the scarcity of clinical studies pertaining to PEMF therapy for dental applications and how it helps cope with dental pain, people sometimes aren't aware of its effectiveness.

A study published this April revealed that miniaturized electromagnetic device (MED) generated pulsed electromagnetic field therapy can be a novel approach to simulate the stability of dental implants during the early healing period. The researchers studied 19 people who received an activated miniaturized electromagnetic device (MED) after getting their dental implants. Radiographic analysis performed at 6 and 12 weeks post

replacement of dental implants found an increase in stability compared to the control group.

A 2016 study which sought to analyze if a new healing cap which generated pulsed electromagnetic field surrounding titanium implants stimulated peri-implant osteogenesis in a rabbit model found that PEMF device stimulated early bone formation surrounding dental implants and improved bone mass. The researchers found that a couple of weeks later, PEMF therapy for dental implants showed a significant 56% increase in trabecular bone fraction and connectivity density compared to the control group. At week 4, PEMF therapy induced an almost 70% increase in bone fraction linked to enhanced trabecular number.

A 2000 study that examined the effectiveness of pulsed electromagnetic field therapy on bone formation surrounding a rough-dental implant found that PEMF stimulation might be very useful for promoting bone formation around such rough-surfaced dental implants. However, the researchers pointed out that it is highly important to select the ideal magnetic density, length of treatment, and duration per day.

A 2015 study which aimed at finding out the effectiveness of pulsed electromagnetic field therapy in improving swelling and pain management post-full-arch immediate loading dental implant surgery found couldn't determine the same. None of the study participants faced swelling related issues 48 hours later and therefore, the researchers could not confirm if PEMF therapy for dental applications helped reduce swelling in patients who received dental implants.

How PEMF can be used in dentistry?

Being earthbound beings, we usually receive enough of the pulsed electromagnetic field from the planet's own magnetic field.

But at times when your body experiences some sort of health issues, including inflammation or diseases, these fields get thrown off, and PEMF generating devices have been shown to aid in healing several kinds of ailments and have been found safe in alleviating dental health problems as well.

Dental practices these days use PEMF devices to aid in pain reduction, healing, inflammation, as well as alleviating discomfort in the mouth and oral areas that follow dental procedures.

PEMF therapy has been touted for its effectiveness in wound healing, pain, and tissue swelling and this might make it promising enough to be used in dentistry.

Applications of PEMF therapy in dentistry

PEMF therapy can reduce healing time after dental procedures like root canal therapy and particularly painful procedures like tooth extractions.

And if you happen to be one of those people who encounter muscle problems in daily life or post-dental treatment, consider PEMF therapy. Apart from pain, people undergoing dental procedures might sometimes just won't feel good. Such discomfort might occur when there happens to be a blockage in the lymphatic system.

Since PEMF therapy is very effective in increasing lymphatic drainage after dental work, it can help get rid of discomfort post dental procedures. Moreover, when used alongside ozone therapy, PEMF therapy can speed up the healing of cavities in the jaw.

Conclusion

Using PEMF machines from trusted brands like TeslasPEMF, dental disorders, and dental health problems such as gum diseases, toothaches, and discomfort, tooth decay, oral cancer, tooth sensitivity, periodontal disorders, halitosis, tooth/gum or jaw erosions.

Your teeth, gums, as well as, jawbones being located on acupuncture meridians, PEMF therapy—which can help balance the associated glands and organs can help alleviate dental health problems.