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PASSIVE EXTREMELY LOW  
ELECTROMAGNETIC FREQUENCY ROLE  
IN PAIN MANAGEMENT

ULOGA EKSTREMNO NISKE FREKVENCIJE  
MAGNETNOG POLJA U ZBRINJAVANJU  
BOLA

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**Abstract**

In this pilot study we evaluated Extremely Low Electromagnetic Frequency (ELEMf) imprinted in Tuning Element 5Minute Relief Patches™ (5MRP) as an adjunct support in postsurgical pain management. 10 postsurgical patient were treated with 5MRP as an adjunct to standard postoperative opioid medication and 10 were treated only with standard postoperative opioid medication. Our study concluded that ELEMf in 5MRP increase pain tolerance threshold in postsurgical pain management thus requiring significant reduction in usage of opioid medication.

**INTRODUCTION**

Not only is pain a major cause of suffering, but it also causes tremendous financial burdens for those who are already suffering.<sup>1</sup>

Using standard opioid medication in pain management is laden with side effects; moreover, use of standard opioid medication has led to worldwide opioid prescription induced deaths and addiction crises. ELEMf technology can offer a novel, efficacious, method for the pathophysiology of pain modulation. The ELEMf method avoids the problematic side effects and crises of opioid use and abuse.

It is time to revisit the paradigm of the biochemical approach to pathophysiology and pharmacology in general. Initial pathological processes occur on a quantum-molecular level, but the current bio-chemical paradigm does not address these initial processes on the quantum. Utilizing a pharmacological approach to treat pathophysiological changes already in progress is time-consuming, costly and laden with side effects. With the development of quantum physics, a novel paradigm for understanding pathophysiology has emerged. Quantum Biophysics gave birth to Quantum Evidence Based Medicine and Nanobiotechnology in the last century. This approach concentrates on nonbiological changes that occur on a quantum level in the human

body prior to any biochemical changes. Many research projects have been underway in this field at leading universities in the U.S.A. and abroad.

In the last decade a new class of health-related products has been developed: this new class utilizes Extremely Low Electromagnetic Frequencies (ELEMf). The frequencies in these items are imprinted with an energetic message, which is passively transmitted through skin contact. This type of imprinting technology is not new. Presently this technology is used every day in electronics by imprinting microchips with different frequencies. We studied Tuning Element 5Minute Relief Patches (5MRP) and its action on pain management in clinical settings

Tuning Element 5MRP are 4 cm by 4 cm, square, Silicone-based, patches infused with Titanium Salt. They are non-invasive, and are permanently attuned with ELEMf. They work strictly by sending vibrational information to the body. They should be applied to the skin at the pain trigger point. Skin acts as a capacitor where the human biofield activates the patches.

5MRP have been used in various aspects of health support including but not limited to, postsurgical, menstrual and general support pain management in clinics for the last 5 years with great success. 5MRP use no medications, herbals

or supplements. They do not require electrical supply. They should be considered as a passive energy product. 5MRP are available over the counter in selected stores and pharmacies in the U. S. and abroad. There is a great number of anecdotal reports and testimonials to their effectiveness; however, no clinical studies on the topic have been published to date.

#### MODE OF ACTION

5MRP technology was developed in 2010.

Missouri State University (MSU) Center for Biomedical and Life Science completed the phase 1, double blind, study on experimental hairless rats. This study concluded in 2015 that TERP are harmless, and may enhance surgical wound healing (not published).

The mode of action of 5MRP was researched by I. Cosic in 2017 and described in the journal *IEEE Transactions on NanoBioscience*.

“Conclusions from Studies on Tuning Element 5 Minute Relief Patches (5MRP) Influence on Pain Through Ion Channels as Predicted by the Resonant Recognition Model (RRM) Within this study, we have analyzed pain related sodium and calcium ion channels, using the RRM model, with the aim to find the characteristic resonant frequencies for opening and closing of these ion channels and to investigate possibility of these frequencies to resonate with frequencies imprinted within 5MRP patches and consequently to propose mechanisms of pain remediation with 5MRP patches.

Results from our study can explain mechanisms of 5MRP patches remediating pain through resonances with pain related ion channels. This would mean that 5MRP patches could mimic the similar activity as toxin based pain killers, but without side effects and particularly avoiding negative drug effects on the digestive system.”<sup>2</sup>

Phase 2 clinical study has simultaneously been underway in our medical clinic on use of 5MRP in support of postoperative pain management.

#### MATERIALS AND METHODS:

After appropriate IRB clearance, informed consents were obtained from 20 female patients with scheduled major abdominal gynecologic surgery utilizing Pfannenstiel incision. They were randomly assigned to 2 groups of 10.

Surgery was performed under general anesthesia in outpatient setting with 23h observation.

After discharge all patients received Rx of oxycodone/acetaminophen 10 mg./325 mg, 50 tablets, with instructions to use 1 or 2 tablets every 4 to 6 h as needed for pain.

##### Group #1

10 Postsurgical patients received 6 patches (3 above and 3 below incision) in OR after completion of surgery and prior to applying post-surgical dressing. The dressing completely covered patches and made them not visible by the patient.

##### Group #2

10 postsurgical patient received no patches.

Patient were not told if they had patches or not under their post surgical dressing. The dressing was removed on the 7<sup>th</sup> day post operatively.

Won-Baker Pain Rating Scale 0 to 10 (provided by National Institute on Pain Control) document was given to all patients to be completed on daily basis. Patients were instructed to chart pain level on 6 h intervals during waking hour, or prior to taking pain medication.

The study was designed to measure 2 parameters:

1. Level of pain in six days post-operative period.
2. Number of pain pills used in the same period.

On day 7, patients had their first postoperative visit, and we removed dressing and collected data

#### Results:

##### Group #1

1. Average Pain level rated 4 out of 10 in first 2 days and tapered down to 0 at day 6.
2. Average usage of opioid pills was total, of 16 pills in 6 days period per patient.

##### Group #2

1. Average pain level was 8 in first 2 days and tapered down to 2 at day 6.
2. Average usage of opioid pills was a total of 43 pills in 6 days period per patient.

#### DISCUSSION

Specific blend of ELEMf provide the correct frequency information and promote healthy protoplasm *with high energy and low entropy* in the cell *resting living* state.<sup>3</sup> The frequencies in 5MRP are imprinted with an energetic message, which is passively transmitted, producing a bioenergy field when in contact with skin. Internally this ELEMf resonates with internal ELEMf created by quantum fields of atomic action in the protoplasm caused by the piezoelectric capacity of connective tissue.<sup>4</sup> (In the quantum physics Standard Model Theory, all the known types of matter and forces are described as quantum fields.)

In humans, internal frequencies merge with material, external energy to form a Human Bioenergy Field.<sup>5</sup> This bioenergy field can be studied most accurately by Bio-Well cameras.<sup>6</sup> Biological systems possess the ability to create and utilize coherent oscillations and respond to external oscillations.<sup>7</sup> Applications of certain frequencies by frequency generating devices such as 5MRP produce electromagnetic resonance within cellular structures. This resonance will cause change in water molecules to affect the configurations and liquid crystal properties of peptides, proteins, cell membranes, organelle membranes and DNA<sup>8</sup> to respond in this case to pain stimuli, thus facilitating pain modulation. This was measured using Resonant Recognition Model (RRM).<sup>9,10</sup> All of these processes depend on healthy protoplasm, and the normal function of the protoplasm depends on structured water molecules.

In Ling's Association-Induction (AI) hypothesis, weak modulation of Hertzian Energy activates selective absorption of K<sup>+</sup> over Na<sup>+</sup> and allows ATP in the cell when exposed to ELEMf to resonate, activating RNA and DNA, restoring normal homeostasis.<sup>3</sup> Stochastic resonance enables this action.<sup>11</sup> Water molecules are the base of protoplasm in the cells and connective tissue. Exposed to ELEMf those molecules are energized and build an “ordered” Exclusion Zone (EZ). “EZ is an unexpectedly large zone of water that

forms next to many submersed materials. EZ gets its name because it excludes practically everything. The EZ contains a lot of charge, and its character differs from that of bulk water (the fourth phase of water).<sup>12</sup> EZ requires electromagnetic energy. This structured (energized) water exposed to specific ELEMf resonance, maintains normal protoplasm, activating ATP, RNA and DNA, and promoting its normal function, following the principal of AI and RRM.<sup>13</sup> As Mae Wan-Ho stated: "Water is central to the action of quantum molecular machines... Water is the means, medium and message of life."<sup>14</sup>

### CONCLUSION

Molecules communicate like a radio set that receives a specific wavelength carried from the radio station. ELEMf acts on living biological matter and creates communication between bio-molecules, which is essential to life. This molecular communication takes place through structured water molecules that surround all biological molecules. It appears that water has an amplifying role. Some of the data implies that signals are emitted by bio-molecules but finally conveyed by water molecules. It is like a string of a guitar: the string vibrates and produces a musical note, but the guitar body amplifies it to audible sound.

Although this is a small pilot study, it clearly shows that 5MRP have a significant role as a supportive adjunct in pain control by increasing pain tolerance threshold without any side effects and requiring significantly lesser opioid utilization.

In response to the present epidemic of prescription opioid abuse, 5MRP may play a significant role in curbing overuse of opioids in pain management on a much larger scale than solely in postoperative pain support.

We believe that technology using ELEMf and the same principle of action is opening doors to a wide variety of new products, with different frequencies and applications, in promoting health and wellbeing.

Understanding the mode of action of Quantum Medicine as well as the entire electromagnetic spectrum of our surroundings and our interaction with it is essential for the future development of medicine.

*\*This statement was not evaluated by FDA*

### Sažetak

U ovoj pilot studiji evaluirana je primena niska frekvencija elektromagnetnog polja (ELEMf) kroz transdermalni flaster (Tuning Element 5Minute Relief Patches<sup>TM</sup> (5MRP)), koja je korišćena kao dodatak standardnoj terapiji postoperativnog bola opioidnim lekovima. Dok je drugih 10 pacijenata terapija bola vršena samo standardnim opioidnim lekovima. Naša studija je zaključila da primena ELEME u 5MRP povećava prag tolerancije bolova u postoperativnim bolnim stanjima, što dovodi do značajno smanjene upotrebe opioidnih lekova.

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