

**WHITE PAPER**

**THE MUNDO METHOD:**

**Therapeutic Hands-on Headache and Migraine Relief**

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## **Therapeutic Hands-on Headache and Migraine Relief**

### **U.S. Headache Population**

Headaches are a major problem in the United States. After backaches, headaches are the most common complaint to physicians. It is estimated that over 40 million Americans suffer from headaches annually, and that two out of every three are women. 8.7 million women and 2.6 million men suffer from migraine with severe disability, with 3.4 million females and 1.1 million males experiencing one or more attacks monthly. Effects on the workplace are proportional. Migraineurs are bedridden about 3 million days per month and are restricted in activity for 74.2 million days per year, costing employers about \$1.4 billion annually in lost productivity.

### **Modern Medical Treatment**

Modern medical treatment is often lengthy, costly and frustrating for both patients and practitioners, and centers around a variety of medications which may be ineffective and/or have side effects. Nationally, we spend over \$450 million on over-the-counter (OTC) pain medicine containing aspirin, acetaminophen and ibuprofen. Pain persists as patients shuttle from primary physician to neurologist, from pain center to headache clinic.

### **Side Effects of Drug Therapies**

In modern headache management, many remedies can unfortunately be worse than the cause. Analgesics, such as aspirin and acetaminophen, are used to control less severe headaches, but side effects of prolonged use, which is widespread, include gastro-intestinal distress and damage to kidneys and/or liver. Caffeine, in combination with the above, though effective for headache, can cause stomach upset, sleep disturbances, heart palpitations, hypertension and emotional distress (Stromfeld).

Ergotamine, a mainstay of abortive treatment, is a potent vasoconstrictor, which can cause nausea and vomiting—often symptoms of migraine. Ergotamine should not be taken by people with blood vessel disorders such as coronary artery disease and high blood pressure nor by those with impaired kidney or liver function (Saper, Raskin). Ergotism, or numbness and tingling in the extremities, is another side-effect. Both ergotamine and analgesics are contraindicated during pregnancy.

### **Habitual Use of Medications and Drug Abuse**

A study of 200 patients taking symptomatic (immediate relief) headache medications concluded that their daily use resulted in chronic headache; discontinuance resulted in improvement of headache (Mathew). Substance abuse is frequently reported in chronic headache patients.

The prescription and OTC agents which are most widely abused are aspirin, acetaminophen and caffeine, followed by butalbital, ergot alkaloids, non-steroidal anti-inflammatory drugs (NSAIDS), narcotics and sympathomimetics. "It has been suggested that the most frequent cause for the transformation of a periodic headache into a daily headache is substance abuse" (Elkind, 1991). In addition to continual headache, these patients have an impaired lifestyle, sustain organ system damage and suffer withdrawal syndrome (Elkind, 1989).

### **Alternative Approaches**

Increasingly, headache patients seek complementary therapies due to their promising success rates and lack of side-effects. In fact, experts have found that any method which aids in relaxation, such as exercise, biofeedback, meditation, yoga or hypnosis, may decrease headache frequency. Literature reviews reveal that home-based biofeedback with relaxation exercises appear to work as effectively as intensive clinic-based treatment, with improvements more long-lasting.

Lance states, "any method that aids in relaxation, whether it be formal exercise, biofeedback, meditation, yoga or hypnosis, may decrease the frequency of migraine." Massage, acupressure of head and neck, hot bath and/or cold packs on neck and temple, or chiropractic

adjustment are effective for many (Lance, Ehrmantraut). Yoga and meditation have been used in the East for centuries to bring equilibrium and perspective to daily life.

Adapted for the West, relaxation exercises have been used extensively to control headache. Such approaches acknowledge the role and importance of the patient in the treatment. In the early 1900's, Schultz and Luthe pioneered autogenic training whereby mental and somatic functions are simultaneously regulated by passive concentration on preselected phrases such as "my hands are heavy and warm." Sacks calls migraine "the prototype of a psychophysiological reaction."

### **Precedents for Non-Medication Therapies**

In the 1970's, Sargent, Green and Walters of the Menninger Foundation began investigation into use of autogenic feedback training (autogenic and biofeedback combined) to control migraine and tension headache (Sargent, 1972). Revolutionary at the time, autogenic biofeedback training demonstrated voluntary control of autonomic responses like heart rate, blood pressure and extremities temperature, all previously thought uncontrollable.

Later Medina, Diamond and Franklin showed that severity and frequency of headaches, and medication usage decreased significantly after training patients in skin-temperature and EMG biofeedback (Medina). Turin found that finger temperature warming, without autogenic training was effective in reducing migraine activity, independent of suggestion effects. In the 1980's, studies by Sargent et al. and Cohen et al. of non-drug treatments for control of migraine showed a trend toward improvement in headache frequency (Sargent, 1986; Cohen). Relaxation training, awareness, desensitization to anxiety-producing events and assertiveness training were shown to markedly reduce headache frequency (Mitchell & Mitchell).

### **Biofeedback and Headache Treatment**

Biofeedback is the use of electrical devices to monitor, amplify, record and report back to the subject a continuous, instantaneous description of biological changes going on inside him or her. This description, in the form of a signal, is in effect a reward. The subject makes a mental association between the information and the sensations accompanying physiological change and, with practice, is able to exert conscious control over a particular internal process (Murphy).

Through instrumentation, the subject is permitted to tune into and monitor subtle energy shifts in her inner world, and feels empowered by the ability to control it (Karlins).

Biofeedback is used for treatment of headache through EMG-monitoring of electro-muscular function, where the client learns to relax forehead tension; and through finger temperature warming, which dilates blood vessels in the hands, effecting those in the head, thereby calming the headache.

### **Hands-On Therapy as Non-Instrumental Biofeedback**

The Mundo Method is similar to biofeedback—without the machine—where the subject can tune into her inner world and monitor the shifts in her own headache, with her own hands replacing sensors, monitors and signals.

Specifically, it is a protocol for headache pain that works like a feedback system, whereby the patient or therapist tunes into the headache, works with its pulses, pain or other sensations, and then redirects the seeming overexcitation to another area of the head. This is done in a front to back direction, “recycling” the headache through the hands.

Like biofeedback, Mundo Method training is an "internal circular process" meaning the somatic information is sensed, changed and fed back into the body by the patient or therapist. Thus, motivation and reward stem from patients verifying their own internal events. The learning depends on the consequences of the behavior while it is actually being learned (Brown, 1974).

Oliver Sacks notes that "a migraine can become a response to itself" so that it outlives its original provocateur and may continue to "arise...from a series of self-perpetuating internal drives—a positive feedback—so that the entire reaction is bound within its own circularity." He pondered, "whether the converse might hold also, namely the possibility of a therapeutic or negative feedback, which might bring an attack to a speedy end." (Sacks)

### **The Mundo Method and Biofeedback**

Both the Mundo Method and biofeedback are self-help methods which exemplify the changing role of patients as active participants in their own health. Patients who attributed the headache pain reduction achieved during therapy to their own efforts enjoyed long-term pain reduction (Spinhoven). Like biofeedback, it is an educational process requiring a commitment,

with "emphasis and attention [placed] on the process rather than the outcome" (Jaffe). The treatment is the process. The patient, usually the object of treatment, can be the giver of treatment.

Both modalities require training over time. The Mundo Method training is generally five sessions with practice on active headaches in between. The training time to become proficient in self-application depends on the student's ability to tune in to and experience the body's signal—the headache—internally and externally. Some students master it after one or two applications and others require more extensive practice. Biofeedback training generally requires 12-24 practice sessions, after which the technical support is withdrawn, but Diamond notes that a major problem of biofeedback therapy is the failure of patients to continue to practice relaxation after being weaned from the machines (Brown, 1977). Brown notes that biofeedback is a temporary intermediary, which requires preparation, persistence and patience to succeed. The Mundo Method requires no machinery, but as in biofeedback, preparation, persistence and patience are essential for success.

### **Concentration—Passive or Active?**

An essential ingredient of this method is concentration, which begins with what Kabat-Zinn calls "mindfulness [or] attending to the sensations themselves," (Kabat-Zinn). Brown states that "concentration is the mental maneuver of trying to pay strict internal attention to these phenomena [sensations] long enough to identify and characterize them or put them to use." The Mundo Method initially uses concentration to find and tune in to a headache, then moves the headache with active, directional concentration. The student is taught to use the same forceful direction of attention required to lift weights.

### **Therapeutic Touch Modality in Pain Reduction**

The power of touch to heal or hurt is one of the essential elemental forces of human existence. In the 1960's Bernard Grad of McGill University, Montreal, Canada conducted extensive investigations into therapeutic laying-on-of-hands healing. Grad performed studies under strict double blind conditions of healer effects on mice and seedlings. Positive effects—

mice goiters shrunk and seedlings grew larger—occurred with even indirect healer contact (Gerber).

Dolores Krieger of New York University School of Nursing, conducted several studies in which a rise in hemoglobin levels was detected in ill people treated by healers and trained nurses. Dora Kunz, a clairvoyant, taught Krieger how to use her own hands to help those in need, and believing it could be taught to anyone, Krieger developed it into a curriculum for nursing programs, and called her modality Therapeutic Touch (TT) (Gerber, Krieger).

The Mundo Method is comparable to TT in 1) the practitioner's state of calm, conscious, confident intent or intentionality and 2) the use of subtle touch to assess, read cues, transfer and balance the energy field of the ill person (Macrae).

Keller investigated the effects of TT on headache pain and found an average 70% pain reduction was maintained over four hours, twice the average pain reduction of the placebo touch, indicating a potential beyond placebo to effect tension headache pain (Keller).

### **Background of the Mundo Method**

This therapeutic modality for symptomatic relief was developed over thirty years ago and uses subtle touch or palpation in combination with active concentration and imagery to work with the sensations of a headache.

In 1991, Mundo noticed that over the years she had unconsciously been observing and working with the same pattern of sensations in her hands and on people's heads. She began to research current headache information and treatment, while exploring the possible mechanisms of her method. After transcribing her kinetic experience into printed instructions, Mundo mailed them to people with headaches to test their efficacy. The recipients were able to successfully self-administer the Mundo Method.

In 1992 Mundo became a Certified Massage Therapist, enabling her to broaden her therapeutic approach. Her first referrals were from Susan Perlman, M.D., Assistant Clinical Professor of Neurology at UCLA.

## **Foundation of the Mundo Method**

Headaches and migraines, which can be palpated, have a marked electrical, albeit explosive pulsatile quality, as distinguished from a pulsing blood vessel. Headaches are mobile and can move to different areas of the head. You can “corner” a headache. By using a combination of gentle palpation and mindfulness concentration skills, individual headache points may be “stilled” or “quieted.” As a result, a frontal headache will palpably “release” to the back of the head, where it is “recycled.” Detectable changes in sensation, which occur while palpating the headache, indicate that the headache or migraine cycle has completed.

The Mundo Method can “break the cycle” of the current headache in 5-20 minutes; severe migraines may take one hour. Relief of migraine-associated nausea is a beneficial side-effect.

\* The above description is an introduction to the Mundo Method and does not constitute training, nor is it complete or replicable in this form.

## **Anecdotal Evidence**

The following anecdotal evidence is drawn from intake questionnaires administered along with the Mundo Method Instructions. Cases 1 and 2 are patients who self-administered treatment, after learning the Mundo Method via written instructions only.

### **Case 1**

A 45-year-old woman with weekly 24-36 hour migraine attacks without aura, unpulsing pain above left eye and at base of skull, photophobia and nausea, with family history of migraine. She takes Tylenol #4 in the evening, Advil, Inderal and Prozac as prescribed by her neurologist.

Patient was sent written instructions by mail. She had her typical migraine, was low energy, intolerant of noise and stress, and after two 10-15 minute applications of the Mundo Method for the very first time, she "felt great." During a subsequent headache, after taking 3

Advil 2-3 hours prior, she self-administered the method twice for twenty-minutes and afterward felt "amazed and very good." Application was unsuccessful during a third headache which was triggered by sun overexposure. She also used it 3-4 times to "ward off very subtle headaches."

## **Case 2**

A female with migraine 1-3 times per month, including prodromal nausea, vomiting and light sensitivity, usually takes Aspirin, Tylenol, Excedrin and caffeine and does not want to take prescription drugs. In the past acupuncture has worked, but constant treatment was cost prohibitive.

Headache was on the temple and mid-forehead. She was given written instructions, and self-treated commenting that she "broke the headache, which was a five moving to ten, and stopped it in its tracks. It was like feeling and fixing a headache from the inside out." It worked in five minutes, and she repeated treatment twice more at two-hour intervals.

Cases 3 and 4 were treated and trained by Mundo directly with written instructions given for home reference.

## **Case 3**

A 34-year-old female with migraine onset in her early twenties said her daily headaches were triggered by worry and stress. The allergist diagnosed allergies to chocolate, dairy products and dust; the chiropractor—back problems; the physical therapist gave neck-stretching exercises; and the neurologist diagnosed mixed headaches and prescribed Midrin and Tenormen, which stopped morning headaches, but left her drowsy and dizzy. The doctor recommended biofeedback which helped with her awareness to relax. She also takes six aspirin daily.

Headache was characterized by pulsing, dull pressure felt at the temples, preceded for a half-hour by lightheadedness and anxiety. During her first office visit, client was treated by Mundo for five minutes and again for three minutes. Headache was stopped and patient felt "more hopeful." Patient "finished off" the headache herself during that session after receiving training.

## Case 4

A 37-year-old female self-described perfectionist, with migraines since puberty had headaches that centered around her left eye and occurred at the middle or end of her period. 1-3 times per week she had throbbing, pulsing, sharp pain beginning each bout dulling at its ending. Stress from work, upper body tension, red wine, aged cheese, hot dogs, too much sun, loud noise and high blood pressure were triggers. She had previously taken Fiorinal with Codeine, Compazine, Demerol and Prozac and also went for emergency room treatment. Hot baths and ice packs on the neck offered some relief.

Client reported positive results during training period for the Mundo Method and subsequently showed written instructions to her husband who now successfully treats her. Client was also taught breathing exercises for relaxation with excellent results.

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