

# The Maharishi Vedic Medicine Chronic Disorders Program

## Introduction and Case Histories

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**D**espite living in a nation of great affluence, the citizens of the United States do not always enjoy the best health. For example, in a recent comparison, the United States ranked twelfth (second from the bottom) among 13 developed countries in order of health indicators, such as neonatal and infant mortality; years of potential life lost; low-birth-weight percentages; life expectancy at 1, 15, 40, 65 and 80 years of age for females and males; and age-adjusted mortality.<sup>1</sup>

Indeed, there is an “epidemic” in the United States of chronic diseases. A 1996 study published in the *Journal of the American Medical Association* found that more than 100 million Americans (nearly 4 in 10) were suffering from one or more chronic disorders.<sup>2</sup> These chronic disorders included, but were not limited to, such common conditions as osteoarthritis, diabetes mellitus, hypertension, coronary heart disease, asthma, psoriasis, chronic headaches, esophageal reflux disease, irritable bowel syndrome, ulcerative colitis, depression, and obesity.

The high prevalence of chronic disorders in the U.S. population calls into question the effectiveness of conventional medicine in preventing and treating chronic disorders. Moreover, because our population is aging, one can expect that the numbers of people who are afflicted will only increase. The net result will be a worsening of the problem of the high cost of health care—which is already spiraling out of control—as we continue to promote expensive, high-technology approaches to try to prevent the premature deaths and suffering of millions of Americans.

Why does conventional medicine appear to have only limited ability to deal with chronic diseases? Modern medicine has its greatest expertise in treating acute disorders, for which mechanisms are more or less clearly understood (e.g., infectious diseases and surgical emergencies). In treatment of acute disease, we repair the diseased part surgically, as in the case of a diseased appendix or gallbladder, or medically, using antibiotics to kill the bacteria that cause an infection. Even then, however, a cure is obtained only when the body completes the healing process by mending a wound or eradicating the remaining bacteria, bringing the individual back to a state of health in which the homeostatic regulatory processes take over.

Chronic diseases have their origins in more complex processes

that are less well-understood by the modern medical paradigm. These diseases often involve multiple long-term causes, including mental and emotional factors as well as nutritional, environmental and lifestyle issues. The reason that chronic disorders are chronic is that the intrinsic regulatory mechanisms that are supposed to maintain balanced functioning of and between the mind and body have become reprogrammed in a way that tends to perpetuate the imbalances causing the chronic disease. In this case, it makes much less sense to cut out the diseased part or kill an invading organism, because the “enemy” is within, (i.e., it is a state of imbalance that has developed in the body itself).

This article explores the efficacy of a system of consciousness-based medicine—Maharishi Vedic Medicine (MVM)—as it is applied in its multimodality form (the Chronic Disorders Program) to treat a variety of chronic illnesses.

### Background of MVM

MVM is a comprehensive system of natural medicine applicable for preventing or treating chronic diseases. *Veda* is a Sanskrit word meaning “knowledge”; it is defined as representing knowledge in its totality. Vedic medicine is the oldest continuously practiced medical system, is rooted in the ancient Vedic civilization of India,<sup>3–5</sup> and has been described in the traditional Vedic literature. Vedic medicine, which includes Ayurveda, has been recognized by the World Health Organization as a sophisticated system of natural medicine with a body of detailed scientific literature and a wide breadth of clinical procedures relevant to preventing and treating diseases and promoting health.<sup>4</sup>

MVM is a modern revival of ancient Vedic medicine, taking into account an extensive range of diagnostic and therapeutic approaches in accordance with classical texts.<sup>3,6</sup> More than 600 scientific research studies have been conducted on the efficacy of individual aspects of MVM and the National Institutes of Health has funded more than \$18 million for research on MVM for treating cardiovascular diseases.

Although allopathic medical research generally favors isolating individual therapeutic elements for study, recent consensus guidelines for research on alternative and complementary medicine (ACM) systems have recommended that traditional systems of medicine be studied as they are clinically used (i.e., as multimodality or “holistic” systems) rather than as isolated components.<sup>7–9</sup> It has also been proposed that case studies are valu-

able tools for preliminary ACM studies.<sup>10</sup> This article examines the synergistic, holistic effect of applying MVM in a clinical setting, using an integrated combination of several of the modalities, as traditionally prescribed in the Vedic literature.

### The MVM Approach

When addressing chronic disease, we may ask: “How can an enormously complex, multicell organism—the human being—with incomprehensibly complicated interactions between the parts, maintain orderly functioning in the first place?” MVM’s answer to this question is that, at its deepest level, the body has an “inner intelligence” that guides it. This fundamental field of intelligence is called *Atma* in the Vedic literature. According to the Vedic texts, the inner intelligence of the body is an expression of the holistic intelligence that is the basis of all nature—the totality of all the laws of nature responsible for the orderly functioning of the universe.

The Vedic description of this field of intelligence, or “consciousness,” is strikingly similar to the description of the “unified field” posited by modern quantum physics.<sup>11</sup> Imbalances can develop within the mind—body if the free flow of this guiding intelligence, from consciousness to mind and body, is hampered at any level. When an individual continues to violate one or more of the laws of nature that structure health, imbalances accumulate and diseases eventually occur.<sup>3</sup>

MVM holds that healing arises from this deepest, most holistic level of mind and body, effecting changes on the surface by stimulating homeostatic and self-repair mechanisms. MVM places primary importance on the field of consciousness, thus MVM is also termed consciousness-based medicine.

According to MVM, the underlying basis shared by all chronic disorders is the lack of full enlivenment or expression of inner intelligence in the mind and body. Blockage of the expression or “flow” of intelligence in any part of the system leads to weakness of self-repair in that area and, consequently, to disruption of normal function and vulnerability to disease. Each modality of MVM operates to enliven the flow of consciousness in human physiology and, simultaneously, to remove blocks or impurities that are inhibiting its full expression and smooth functioning.

An MVM practitioner uses diagnostic procedures, including pulse diagnosis, to determine where the imbalances in the physiology are located and then designs a program combining several of the following modalities described below to address those specific imbalances.

### Transcendental Meditation™ (TM)

Introduced to the West by Maharishi Mahesh Yogi almost 50 years ago, TM has been extensively researched.<sup>12,13</sup> Studies have indicated that TM practice produces a unique physiologic state of deep relaxation combined with expanded alertness (a state of “restful alertness”).<sup>14–18</sup> Twice daily 20-minute practice is recommended by MVM for stress-reduction and self-development. Many studies and meta-analyses suggest that the beneficial effects of TM on chronic disease risk factors are greater than those elicited

by traditional or clinically devised relaxation programs.<sup>19–27</sup>

### Pulse Diagnosis (Nadi Vigyan)

Using a traditional Vedic system of pulse diagnosis, the physician palpates the radial pulse to detect patterns that correspond to modes of physiologic functioning and imbalanced functioning that may be at the basis of current or future health problems.<sup>3,28</sup> This assessment, taken together with a medical history and clinical examination, provides the basis for recommendations for herbal preparations, dietary modifications, purification procedures, and other MVM modalities.

### Maharishi Vedic Sounds Therapy

A patient who is in an in-residence program may be treated with Maharishi Vedic Sounds therapy in which he or she listens to prescribed portions of the Vedic literature that are understood to correspond to specific areas of the human physiology and promote homeostatic self-repair processes in those areas.<sup>3,29,30</sup>

### Maharishi Vedic Vibration Technology (MVVT)

According to MVM, all matter—including the cells, tissues, and organs of the human physiology—is structured in vibrations of the underlying nonmaterial field of consciousness. Experts trained in MVVT project vibrations selected from the Vedic literature that correspond to specific parts of the physiology, with the aim of transforming disorderly functioning into orderly functioning.<sup>31,32</sup>

### Diet

A therapeutic diet is customized for each individual patient according to his or her constitutional requirements and specific imbalances.<sup>3</sup> MVM diets in general emphasize fresh vegetables; fruits; whole grains; nuts; foods with high-fiber contents; and dietary sources of antioxidants, vitamins, and minerals.

### Herbal Preparations

Herbal preparations from the Ayurvedic materia medica<sup>33</sup> are prescribed to address each patient’s specific imbalances. Multiple herbs are often blended together and a single preparation may contain up to 20 different herbs and fruit extracts combined to enhance their synergistic effects.<sup>3,34–36</sup>

### Physiologic Purification Procedures

A series of traditional Vedic physical therapies are prescribed according to clinical indications to eliminate waste products and toxins that may obstruct the flow of the body’s inner intelligence.<sup>3,37–40</sup> These therapies are tailored to each patient’s needs and include herbalized oil massages, external heat applications, herbalized steam baths, warm oil applications, and gastrointestinal elimination therapies.

## Vedic Exercise

MVM recommends that patients practice a set of Vedic exercises daily. These include yoga stretching and breathing exercises that have been shown to decrease cardiovascular risk factors and stress-related neuroendocrine markers as well as increasing psychologic health.<sup>41–43</sup>

## Environmental Factors

### *The Near Environment*

The classical texts of Vedic architecture called the *Maharishi Sthapatya-Veda* emphasize the influence of home and work environments on the individual's health.<sup>3,29,31</sup> Based upon this traditional knowledge, each patient is offered recommendations for beneficial orientations and layouts of the home and office.

### *The Distant Environment*

MVM also considers the relationship of the individual with the entire extended environment, including the influences of the cycles and rhythms of the sun, moon, stars, and planets. Known as *Maharishi Jyotish*, this traditional approach includes assessment of risk factors, future health trends, and recommendations for preventing illness.<sup>29</sup>

## Case Studies

Below we describe results with three patients who were treated in the Chronic Disorders Program of Maharishi Vedic Medicine. These three cases met the inclusion criteria of (1) the presence of an adult-onset chronic disease and, (2) a reasonably high probability that we could follow the patient over the long-term. Supervised by physicians with at least 20 years of training and experience in the practice of Western primary care medicine and MVM, the Chronic Disorders Program used professionally trained staff.

Patients in this series (1) had an initial consultation; (2) were given preparatory procedures to follow at home for several weeks; (3) were treated at the clinic for 1–2 weeks while being in-residence; and (4) were given a follow-up home-based program.

Tables 1–3 summarize the allopathic and MVM diagnoses and in-residence treatment approaches used for each of the 3 patients. All patients participated in a multimodality program designed to enliven subtle levels of awareness (inner intelligence), while simultaneously purifying and strengthening their more manifest layers of physiology.

Features unique to the Chronic Disorders Program of MVM included: (1) use of TM to develop consciousness and reduce stress; (2) Vedic Sounds therapy; (3) Maharishi Vedic Vibration Technology; (4) specific multiherbal compounds (Veda herbal formulas\*) used both orally and topically (herbalized oil applica-

tions); (5) instruction in self-pulse diagnosis for patients to monitor their own progress; and (6) health education classes integrating Vedic and conventional medical knowledge.

### *Case 1*

LP had multiple sclerosis, a seizure disorder, allergic rhinitis, asthma, and hypertension. This 47-year-old female presented for an initial consultation and 4 weeks later began a 7-day, in-residence, multimodality program of MVM.

She had been diagnosed with multiple sclerosis 7 years earlier, although her symptoms had begun several years before that. Her symptoms at presentation included generalized severe fatigue, a visual-field defect, occasional bladder dysfunction, balance problems requiring use of a cane, numbness of the left foot with foot drop, cognitive difficulties including memory loss, and episodic spasms of the rectal sphincter.

She was taking 0.3 mg of betaserone subcutaneously every other day and 5 mg of methylphenidate orally up to 5 times per day as needed for fatigue and cognitive difficulties. She was also taking 1000 mg of acetaminophen per day to treat noontime fever.

In addition, she suffered from a seizure disorder (complex partial and juvenile myoclonic seizures), which was diagnosed in 1978. Her seizures were triggered by visual or auditory stimuli. She was taking 800 mg of carbamazepine per day, 500 mg of levetiracetam 5 times per day, and 400 mg of gabapentin 6 times per day and had had no recent seizures.

She also had chronic allergies and asthma, with sinus congestion and rare wheezing, for which she was taking fexofenadine 60 mg twice daily as well as an oral bronchodilator (albuterol) and corticosteroid inhalers, both twice per day, and a nasal corticosteroid inhaler once per day.

She had also been diagnosed as hypertensive 1 year earlier and was taking a, 25 mg of atenolol (a beta-blocker) per day and 10 mg of lisinopril (an angiotension converting enzyme [ACE] inhibitor) per day.

Following her first consultation, this patient began a home program of herbal preparations and modified diet. Upon arriving for the in-residence phase of treatment, after having followed the recommended home MVM program for 4 weeks, she described herself as “generally stronger.”

She noted improvements in balance and memory. She had stopped taking the ACE inhibitor and remained normotensive. During the course of her 7-day in-residence program, her balance continued to improve and she stopped using her cane. Her left-leg numbness and left-foot drop resolved. Her bladder control improved, her urinary frequency diminished, and her rectal sphincter spasm resolved. Her fatigue was greatly reduced and her cognitive function was greatly improved. She noted diminished hypersensitivity to auditory and visual stimuli and she was able to reduce her carbamazepine dosage by 50 percent to 400 mg per day.

Her chronic rhinitis and asthma symptoms also diminished significantly. She discontinued using albuterol and oral and nasal corticosteroid inhalers, which she had been using regularly per day for several years, and she reduced fexofenadine intake by 50

\*Herbal products used in the MVM program are prepared and distributed by Maharishi Ayurveda Products International, Colorado Springs, Colorado.

percent to 60 mg per day.

She was discharged after 7 days on a home regimen that included herbal preparations, dietary modification, yoga exercise, and TM practice 20 minutes two times per day.

This patient continued to improve at home. Her neurologist reported, 2 months after discharge from in-residence treatment, that she was "doing remarkably well," with only occasional sensory symptoms and some residual intermittent left-arm seizure activity. She was also noted to have "extremely mild weakness of left ankle dorsiflexion," no longer requiring a cane for ambulation.

Her bladder and rectal sphincter function were normal and her methylphenidate was discontinued and her carbamazepine reduced to 100 mg per day at first and subsequently discontinued.

As a consequence of discontinuation of carbamazepine, her iatrogenic leukopenia resolved. Her white blood cell count increased from a low of 2.6 (that had been recorded 2 months prior to the in-residence MVM treatment) to 5.1 2 months following in-residence treatment. She had marked diminution of rhinitis and asthma symptoms and her use of fexofenadine had diminished to 60 mg, 3–4 times per week, and she had not used albuterol or oral or nasal steroid inhalers since being discharged from the in-residence program 3 months previously.

This patient also had discontinued using acetaminophen. Despite her discontinuation of the ACE inhibitor, her blood pressure was 108/82, the lowest reading produced since she had begun using antihypertensive medication. At 3 months post-treatment, she reported no numbness, foot-dragging, or tripping and had a marked improvement in balance. She was no longer using a cane. Her fatigue was significantly diminished. She had recently returned to part-time scientific consulting work and successfully completed a trip to Washington, D.C., which involved highly focused cognitive activity as well as walking long distances.

#### Case 2

This patient, TG, had both chronic back pain and sciatica and was obese. Ten (10) weeks after presenting for an initial consultation, this 42-year-old male began a 14-day in-residence Chronic Disorders Program of MVM.

The patient's chief complaint was severe chronic low-back pain and sciatica, with an onset in late adolescence. Two (2) years prior to his initial consultation, he had been hospitalized briefly in February 2000 for acute back pain. Subsequently, his back pain had increased in intensity and was constant by the time of the consultation.

The patient's pain was greatest in the center and to the left of his lumbosacral spine. He had severe right-sided sciatica, with numbness and chronic pain in his right leg and foot (in the lateral and anterior aspects of his right lower extremity from his thigh to his foot), which he described as "squeezing pain." This chronic pain was so severe that he had frequent suicidal thoughts (e.g., "I wanted to drive my car into a tree."). His medication when he was first seen was 200 mg of celecoxib, two times per day. The patient was chronically obese, with a current weight of 250

pounds, down from the 275 pounds he weighed 1 year prior, as a result of strict dieting and exercise. With a height of 5'9", his ideal body weight was approximately 165 pounds. His back pain was undiminished following this weight loss. Despite continued strict dieting, he had been unable to lose further weight.

At this patient's initial consultation, he had severe limitation of motion of his lumbosacral spine (80 percent limitation of forward and right lateral flexion and 60 percent limitation of left lateral flexion). Straight leg raising, a test for sciatica, was strongly positive at a 45-degree elevation of his right leg. Sensation was diminished to pinprick and light touch along his right lateral thigh and lower leg. His deep-tendon reflexes were normal and symmetrical.

He was started on a home regimen of herbal preparations and a modified diet for 10 weeks prior to admission to the in-residence program. The diet program included classical Vedic medicine recommendations specifically designed to address his underlying metabolic imbalances. In addition, he was advised to have his main meal at lunch, to eat a light supper, and to strictly avoid eating cold foods and drinks, raw foods, leftovers, and packaged and processed foods.

During the home phase of his treatment, he lost 35 pounds and his admission weight on entering the in-residence program was 215 pounds. On admission, he reported his back pain as reduced by 50 percent, although he still stated that he had muscle tension and irritation (which he described as a sensation of heat or "inflammation") in his low back and right leg.

During the 14-day treatment, he lost an additional 15 pounds and weighed 200 pounds at discharge. By this time, he had been entirely free of back or leg pain for 7 days and reported that his chronic muscle tension and inflammation in his low back and leg were resolved. The mobility of his lumbosacral spine was significantly improved, with a 30-percent limitation of forward, right lateral, and left lateral flexion. He was discharged with a home-care program of herbal preparations, diet, yoga exercise, and TM practice, two times per day.

At 3 months post-treatment, this patient reported continued absence of back pain, with the exception of occasional mild pain on lifting, which resolved immediately after ceasing to strain. His right leg pain and numbness had not recurred and he was able to resume and maintain all his normal activities. He reported improved flexibility in his lumbosacral spine and his weight was 203 pounds. On physical examination, his forward, right and left lateral flexion were all improved, with the limitation in each direction reduced to 15 percent. Straight leg raising was also improved and was positive at a 75-degree elevation of his right leg. His sensation to pinprick and light touch were normal in his lower extremities.

#### Case 3

This patient, BW, had interstitial pulmonary fibrosis (IPF) and dermatomyositis. This 45-year-old female nurse-practitioner presented to the Chronic Disorders Program (CDP) for initial evaluation. At a major medical center, three (3) months prior, she had been diagnosed with inflammatory IPF. This patient had a long-term (16-year) history of dermatomyositis, with muscle weak-

ness, skin rashes, and fatigue and her current pulmonary disease was felt to be an autoimmune process associated with the dermatomyositis. Her pulmonary symptoms, including cough and dyspnea, had begun 2 years prior to her initial evaluation for the CDP and these symptoms had steadily worsened by the time she was seen.

At her initial evaluation, this patient's chief symptoms were a chronic cough that produced copious amounts of clear sputum, chest tightness and restriction, dyspnea on exertion (after climbing  $\frac{1}{2}$  of a flight of stairs), and intermittent severe fatigue. She also reported that she experienced recurrent burning pain in her upper chest and shoulder-girdle muscles.

Pulmonary function tests performed 2 months prior her initial consultation revealed a 25-percent loss of oxygen diffusing capacity (DLCO 75% of normal).

Conventional medical interventions failed to relieve her symptoms. These interventions included bronchodilator and corticosteroid inhalers, oral corticosteroids, and multiple courses of antibiotics. She was unable to work and was placed on full medical leave. Her rheumatologist advised her to start a weekly dose of methotrexate and to expect to be on this medication for the rest of her life.

After evaluation for the Chronic Disorders Program, this patient was placed on a home regimen of herbal preparations and a modified diet in preparation for in-residence treatment, which began 24 days later. During the course of the 7-day in-residence program, she reported marked improvement in her chest restriction and breathing capacity and a decrease in dyspnea. Her cough was much reduced and had almost completely resolved by the end of the in-residence program. Her upper-chest and shoulder muscle pain had mostly resolved and her energy level was clearly improved. By the end of the in-residence program, this patient was able to climb 4 flights of stairs without dyspnea. She was discharged with home program that included herbal preparations, exercise, and dietary recommendations.

Following discharge, this patient did well for 2 months and was able to be taken off medical leave in order to resume full-time work. However, she found it difficult to follow the home program during the holiday period and suffered a recurrence of productive coughing, heaviness in her chest, and mild dyspnea, although she maintained a normal energy level and continued working.

Following resumption of her herbal and dietary program, her cough again reduced and her lung restriction and dyspnea resolved. Pulmonary function tests repeated 5 months after discharge showed a marked increase in oxygen diffusing capacity (DLCO) to 91 percent of normal.

Over the following year, this patient had several transient episodes of recurrence of coughing, without dyspnea or chest restriction. She also experienced occasional episodes of shoulder and pelvic girdle pain, which were mild and self-limited. On the whole, she remained symptom-free and has maintained near-normal pulmonary function. Her energy level has remained good and she has maintained her normal work schedule and a full exercise program, including long-distance bicycling.

## Discussion

The three patients in this case series had intractable, long-standing chronic disorders that had not, over several years, yielded to conventional medicine. These patients had clinically significant improvements after participating in Maharishi Vedic Medicine.

In the first case, several simultaneous improvements were reported, including reductions in multiple sclerosis-related physical and cognitive symptoms, seizure medication, hypertension, and asthma-related symptoms. In the second case, chronic severe lower-back pain and inflammation remitted and the patient was still pain-free at 3 months follow-up. This patient also lost a large amount of weight without apparent strain or side effects. In the third case, the patient attained near-normal pulmonary function and her chest tightness, shoulder and chest pain, chronic cough, and fatigue were markedly reduced or eliminated.

It is unlikely that the improvements seen were the results of a placebo effect because each patient had previously tried conventional medical treatment, yet, experienced little sustainable relief or improvement. These previous courses of conventional medical treatment may be regarded as equivalent to control periods in this case series.

These findings are consistent with a substantial body of evidence from studies on components of MVM. For example, a cross-sectional study of faculty and staff at several midwestern universities<sup>44</sup> showed that subjects who reported simultaneous use of several MVM techniques had a 70-percent lower incidence of medical disorders. Similar results were found in randomized, controlled clinical trials with a variety of individual medical outcomes involving blood pressure,<sup>45</sup> angina pectoris,<sup>46</sup> and atherosclerosis.<sup>47,48</sup>

These findings are also consistent with an earlier published case series.<sup>6</sup> There, we reported results of applying the Chronic Disorders Program to four chronically ill patients. The first patient, who had a severe form of sarcoidosis and whose condition was deteriorating, experienced complete remission of the disease; this remission has been maintained for 6 years. The second patient had a resolution of longstanding hypertension secondary to permanent renal damage that had occurred decades earlier; despite predictions that she would need lifelong antihypertensive medication, this patient was able to discontinue medications completely and still maintain normal blood pressure. A third patient with long-standing Parkinson's disease improved significantly as measured by an independent neurologic examination (the Short Parkinson's Evaluation Scale), was able to decrease anti-Parkinsonian medication, and experienced substantially fewer drug-induced side-effects. A fourth patient with hypertension, panic disorder, and type II diabetes mellitus improved significantly and was able to reduce antihypertensive and diabetic medications and eliminate antianxiety medication.

That patients with disparate chronic disorders experienced significant improvement with the MVM program is consistent with the Vedic understanding that there is a singular principle—intelligence or consciousness—underlying all physiologic and mental processes. MVM aims to address the problem of chronic disease

at this most fundamental level by enlivening the body's inner intelligence. The effect is mobilization of intrinsic homeostatic and self-repair mechanisms, which then correct the physiologic imbalances underlying the disease process.

A second, indirect mind-body mechanism also plays an important role in MVM treatments: the mental and behavioral approaches of MVM, including TM, have been found to increase mental alertness, decrease stress, and improve mood and motivation.<sup>13,19,24,26</sup> This has been shown to lead to better behavioral choices and healthier lifestyles, thereby reducing factors further that fostered the imbalances in the first place. Reduction in health-damaging behaviors—including cigarette smoking, alcohol consumption, poor diet, and lack of exercise—are frequently reported by individuals who practice these techniques and this has been documented in the scientific literature.<sup>12,23,35</sup> This expanded awareness of, and motivation for, attaining health is critical so that, when patients return home, they continue following the MVM dietary and behavioral recommendations to avoid recreating the imbalances that necessitated treatment.

## Conclusions

The present case series in this article builds on a substantial body of published data in the medical and scientific literature and suggests that MVM has theoretical and practical features that are not found in conventional medicine and that make it uniquely useful for addressing the current epidemic of chronic disease. Further research with long-term follow-up is warranted to evaluate the effectiveness and mechanisms of this system of consciousness-based natural medicine further. □

## References

1. Starfield B. Is U.S. health really the best in the world? *JAMA* 2000;284:483–485.
2. Hoffman C, Rice D, Sung H. Persons with chronic conditions: Their prevalence and costs. *JAMA* 1996;276:1473–1479.
3. Sharma H, Clark C. Contemporary Ayurveda: Medicine and Research in Maharishi Ayur-Veda New York: Churchill Livingstone, 1998.
4. Bannerman RH, Burton J., Wen-Chien C. Traditional Medicine and Health Care Coverage: Reader for Health Administrators and Practitioners. Geneva: World Health Organization, 1993.
5. Thatt UM, Dahanukar SA. Ayur-Veda in contemporary scientific thought: Trends in pharmacology. *Science* 1986;7:247–251.
6. Nader T, Rothenberg S, Averbach R, Charles B, Fields JZ, Schneider RH. Improvements in chronic diseases with a comprehensive natural medicine approach: A review and case series. *Behavioral Med* 2000;26:34–46.
7. Workshop on Alternative Medicine. A report to the National Institutes of Health on alternative medical systems and practices in the United States, 1994. In: *Alternative Medicine—Expanding Medical Horizons*. Chantilly, VA, 1994.
8. Steering Committee for the Prince of Wales' Initiative on Integrated Medicine. *Integrated Healthcare: A Way Forward for the Next Five Years?* Foundation for Integrated Medicine, 1997.
9. Vickers EA. How should we research unconventional therapies? Panel report from the conference on Complementary Therapies and Alternative Medicine, National Institutes of Health, USA. *Int J Technol Assess Healthcare* 1997;13:111–121.
10. Lukoff D, Miller M. The case study as a scientific method for researching alternative therapies. *Altern Ther* 1998;4:44–52.
11. Hagelin J. Is consciousness the unified field? A field theorist's perspective. *Modern Sci Vedic Sci* 1987;1:29–88.
12. Sharma H, Alexander CN. Maharishi Ayurveda: Research review. Part one—Maharishi Ayurveda and TM. *Complement Med Int* 1996;3:21–28.
13. Alexander CN, Robinson P, Orme-Johnson DW, Schneider RH, Walton KG. Effects of Transcendental Meditation compared to other methods of relaxation and meditation in reducing risk factors, morbidity and mortality. *Homeostasis* 1994;35:243–264.
14. Dillbeck MC, Orme-Johnson DW. Physiological differences between Transcendental Meditation and rest. *Am Psychol* 1987;42:879–881.
15. Wandhofer A, Kobal G, Plattig KH. Shortening of latencies of human auditory evoked potentials during the Transcendental Meditation technique. *Zeitschrift für Elektroenzephalographie und Elektromyographie EEG-EMG* 1976;7:99–103.
16. Badawi K, Wallace RK, Orme-Johnson D, Rouzeré A-M. Electrophysiologic characteristics of respiratory suspension periods occurring during the practice of the Transcendental Meditation program. *Psychosom Med* 1984;46:267–276.
17. Jevning R, Wallace RK, Biedebach M. The physiology of meditation: A review. A wakeful hypometabolic integrated response. *Neurosci Biobehav Rev* 1992;16:415–424.
18. Wallace RK, Benson H, Wilson AF. A wakeful hypometabolic physiologic state. *Am J Physiol* 1971;221:795–799.
19. Eppley K, Abrams AI, Shear J. Differential effects of relaxation techniques on trait anxiety: A meta-analysis. *J of Clinical Psych* 1989;45:957–974.
20. Kuchera, M. The effectiveness of meditation techniques to reduce blood pressure levels: A meta-analysis. *Dissertation Abstr Int* 1987;47(11-B):4639.
21. Dillbeck M, Cavanaugh K, Glenn T, Orme-Johnson D, Mittlefehldt V. Consciousness as a Field: The Transcendental Meditation and TM-Sidhi Program and Changes in Social Indicators. *J Mind Behavior* 1987;8:67–104.
22. Schneider RH, Alexander CN, Wallace RK. In search of an optimal behavioral treatment for hypertension: A review and focus on Transcendental Meditation. In: Johnson EH, Gentry WD, Julius S, eds. *Personality, Elevated Blood Pressure, and Essential Hypertension*. Washington DC: Hemisphere Publishing Corporation, 1992:291–312.
23. Alexander CN, Robinson P, Rainforth M. Treatment and prevention of drug addiction through Transcendental Meditation: An overview and statistical meta-analysis. *Alcohol Treat Q* 1994;11:13–87.
24. Alexander CN, Rainforth MY, Gelderloos P. Transcendental Meditation, self-actualization and psychological health: A conceptual overview and statistical meta-analysis. *J Soc Behav Perspect* 1991;6:189–247.
25. Orme-Johnson DW. Medical care utilization and the Transcendental Meditation program. *Psychosom Med* 1987;49:493–507.
26. MacLean C, Walton K, Wenneberg S, Levitsky D, Mandarino J, Waziri R, Hillis SL, Schneider RH. Effects of the Transcendental Meditation program on adaptive mechanisms: Changes in hormone levels and responses to stress after 4 months of practice. *Psychoendocrinology* 1996;22:277–295.
27. Walton KG, Pugh N, Gelderloos P, Macrae P. Stress reduction and preventing hypertension: Preliminary support for a psychoneuroendocrine mechanism. *J Altern Complement Med* 1995;1:263–283.
28. Sharma P. *Charaka Samhita*, vols. I and III. Varanasi, India: Chaukhamba Orientalia, 1984.
29. Nader T. *Human Physiology—Expression of Veda and the Vedic Literature*. Vlodrop, Holland: Maharishi University Press, 1995.
30. Nader T. Scientific research on the instant relief program. Online document at: [www.vedic-health.com/health](http://www.vedic-health.com/health) 1997.
31. Maharishi Mahesh Yogi. *Maharishi Forum of Natural Law and National Law for Doctors*. India: Age of Enlightenment Publications; 1995.
32. Nader TA, Smith DE, Dillbeck MC, Schanbacher V, Dillbeck SL, Gallois P, Beall-Rougerie S, Schneider RH, Nidich SJ, Kaplan GP, Belok S. A double blind randomized controlled trial of Maharishi Vedic Vibration Technology in subjects with arthritis. *Front Biosci* 2001;6:h7–17h.

33. Nadkarni AK. The Indian Materia Medica, vols. I and II. Bombay, India: Popular Prakashan Private, 1976.
34. Sharma H. Phytochemical synergism: Beyond the active ingredient model. *Altern Ther Clin Pract* 1997;4:91-96.
35. Sharma HM, Alexander CN. Maharishi Ayurveda: Research review. Part Two—Maharishi Ayurveda herbal food supplements and additional strategies. *Complemen Med Int* 1996;3:17-28.
36. Bondy S, Hernandez T, Mattia C. Antioxidant properties of two Ayurvedic herbal preparations. *Biochem Arch* 1994;10:25-31.
37. Schneider RH, Cavanaugh K, Rothenberg S, Averbach R, Robinson D, Wallace RK. Health promotion with a traditional system of natural medicine: Maharishi Ayur Veda. *J Soc Behav Perspect* 1990;5:1-27.
38. Waldschutz R. Influence of Maharishi Ayurveda purification treatment on physiological and psychological health. *Erfahrungsheilkunde Acta Medica Empirica* 1988;11:720-729.
39. Sharma HM, Nidich SI, Sands D, Smith DE. Improvement in cardiovascular risk factors through Panchakarma purification procedures. *J Res Edu Indian Med* 1993;12:2-13.
40. Sharma HM. Maharishi Ayurveda. In: Micozzi MS, ed. *Fundamentals of Contemporary and Alternative Medicine*. New York: Churchill Livingstone, 1998:243-257.
41. Udupa KN, Singh RH, Settiwar RM. Studies of physiological endocrine, metabolic responses to the practice of yoga in young normal volunteers. *J Res Ind Med* 1975;6:345-353.
42. Udupa KN, Singh RH, Yadava RA. Certain studies on psychological and biochemical responses to the practice of hatha yoga in young normal volunteers. *Indian J Med Res* 1975;61:237-244.
43. Santha JK, Sridharan SK, Patil ML. Study of some physiological and biochemical parameters in subjects undergoing yogic training. *J Ind Med Res* 1981;75:120-124.
44. Orme-Johnson DW, Herron RE. An innovative approach to reducing medical care utilization and expenditures. *Am J Manage Care* 1997;3:135-144.
45. Schneider RH, Staggers F, Alexander C, et al. A randomized controlled trial of stress reduction of hypertension in older African Americans. *Hypertension* 1995;26:820-827.
46. Zamarra JW, Schneider RH, Besseghini I, Robinson DK, Salerno JW. Usefulness of the Transcendental Meditation program in the treatment of patients with coronary artery disease. *Am J Cardiol* 1996;78:77-80.
47. Castillo-Richmond A, Schneider R, Alexander C, Cook R, Myers H, Nidich S, Haney C, Rainforth M, Salerno J. Effects of stress reduction on carotid atherosclerosis in hypertensive African Americans. *Stroke* 2000;31:568-573.
48. Fields JZ, Walton KG, Schneider RH, Nidich S, Pomerantz R, Suchdev P, Castillo-Richmond A, Payne K, Clark ET, Rainforth M. Effect of a multimodality natural medicine program on carotid atherosclerosis in older subjects: A pilot trial of Maharishi Vedic Medicine. *Am J Cardiol* 2002;89:952-958.

**Table 1. Maharishi Vedic Medicine (MVM) Treatment for LP (Case 4)**

|  |  |
|--|--|
| Allopathic diagnoses                           | Multiple sclerosis, seizure disorder, allergic rhinitis, asthma, and hypertension  |
| MVM diagnoses                                  | <i>Vata-Pitta</i> imbalance, including the <i>sub doshas</i> of <i>Prana Vata</i> , <i>Udana Vata</i> , <i>Vyana Vata</i> , <i>Sadhaka Pitta</i> , <i>Ranjaka Pitta</i> , <i>Tarpa ka Kapha</i> , and <i>Rasa</i> and <i>Majja Dhatus</i> (plasma and nervous system tissues)  |
| <b>Treatments</b>                              |  |
| Consciousness                                  | Practice of Transcendental Meditation, <sup>TM</sup> two times per day   |
| Sound, vibration                               | Vedic Sounds therapy and Maharishi Vedic Vibration Technology specific to this patient, <i>Sama Veda</i> and <i>Gandharva Veda</i>   |
| Diet   | <i>Vata-Pitta</i> balancing diet with <i>Kapha</i> restrictions favoring warm and unctuous foods (oils, ghee), foods with a sweet taste, and whole dairy products; avoiding cold foods, sour foods (vinegar, sour citrus fruits, tomatoes), heavy foods (cheese, yogurt), and red meat   |
| Herbal regimen <sup>a</sup>                    | Multiherbal compounds to address imbalances, including an aqueous extract of <i>Veda 357</i> ( <i>Barlena prionitis</i> ; <i>Cyprus deodara</i> ; and <i>Zingiber officinale</i> ) and whole-body topical application of herbalized castor oil with ingredients of <i>Veda 699</i> ( <i>Barlena prionitis</i> , <i>Hemidesmus indicus</i> , <i>Oryza stiva</i> , <i>Rubia cordifolia</i> , and <i>Shorea robusta</i> ) |
| Purification procedures ( <i>panchakarma</i> ) | Including herbalized oil applications and oil-pouring to entire body, application of herbal boluses, and elimination therapy   |
| Exercise                                       | Yoga exercises and breathing exercises ( <i>pranayama</i> )  |
| Health education                               | Daily classes, including instruction in principles of diet and nutrition, daily and seasonal behavioral routines, and self-pulse diagnosis.  |

<sup>a</sup>Herbal products used in the Maharishi Vedic Medicine program are prepared and distributed by Maharishi Ayurveda Products International, Colorado Springs, Colorado.

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**Table 3. Maharishi Vedic Medicine (MVM) Treatment for BW (Case 3)**

|  |   |
|--|---|
| Allopathic diagnoses                           | Interstitial pulmonary fibrosis, dermatomyositis  |
| MVM diagnoses                                  | <i>Pitta–Vata</i> imbalance, including the <i>subdoshas</i> of <i>Ranjaka</i> and <i>Bhrajaka Pitta</i> , <i>Prana</i> and <i>Udana Vata</i> , <i>Shleshaka Kapha</i> , and <i>Rasa, Rakta</i> , and <i>Mamsa Dhatus</i> (plasma, blood, and muscle tissues)  |
| <b>Treatments</b>                              |   |
| Consciousness                                  | Practice of Transcendental Meditation, <sup>TM</sup> two times per day  |
| Sound, vibration                               | Vedic Sounds therapy and Maharishi Vedic Vibration Technology specific to this patient, <i>Sama Veda</i> and <i>Gandharva Veda</i>  |
| Diet   | <i>Pitta–Vata</i> balancing diet favoring warm foods, semiliquid foods, and slightly unctuous foods (including ghee); avoiding cold or raw foods, sour foods, heavy foods (cheese, yogurt), and red meat  |
| Herbal regimen <sup>a</sup>                    | Multiherbal compounds to address the imbalances, including a fermented extract of sugarcane and Veda 517 ( <i>Vitis vinifera</i> , <i>Cinnamomum zeylanicum</i> , <i>Crocus sativus</i> , <i>Callicarpa macrophylla</i> , <i>Elettaria cardamomum</i> , <i>Cinnamomum tamala</i> , <i>Piper nigrum</i> , <i>Piper longum</i> , <i>Embella ribes</i> ) |
| Purification procedures ( <i>panchakarma</i> ) | Including herbal paste massage and herbal bolus applications to chest, pouring of herbalized buttermilk on forehead, and elimination therapy  |
| Exercise                                       | Yoga exercises and breathing exercises ( <i>pranayama</i> )   |
| Health education                               | Daily classes, including instruction in principles of diet and nutrition, daily and seasonal behavioral routines, and self-pulse diagnosis  |

<sup>a</sup>Herbal products used in the Maharishi Vedic Medicine program are prepared and distributed by Maharishi Ayurveda Products International, Colorado Springs, Colorado.

**Table 2. Maharishi Vedic Medicine (MVM) Treatment for TG (Case 2)**

|  |   |
|--|---|
| Allopathic diagnoses                           | Chronic low-back pain, sciatica, and obesity  |
| MVM diagnoses                                  | <i>Kapha–Vata</i> imbalance, including the <i>subdoshas</i> of <i>Kledaka</i> and <i>Avalambaka Kapha</i> , <i>Prana</i> and <i>Vyana Vata</i> , <i>Pachaka</i> and <i>Ranjaka Pitta</i> , and <i>Medo Dhātu</i> (adipose tissue)   |
| <b>Treatments</b>                              |   |
| Consciousness                                  | Practice of Transcendental Meditation, <sup>TM</sup> two times per day  |
| Sound, vibration                               | Vedic Sounds therapy and Maharishi Vedic Vibration Technology specific to this patient, <i>Sama Veda</i> and <i>Gandharva Veda</i>  |
| Diet   | <i>Kapha–Vata</i> balancing diet favoring warm and dry foods, light foods (e.g., cooked leafy greens), and foods with pungent and bitter tastes; avoiding cold foods, sweet foods, oily foods, and red meat   |
| Herbal regimen <sup>a</sup>                    | Multiherbal compounds to address imbalances, including aqueous extract of Veda 333 ( <i>Pluchea lanceolata</i> , <i>Fagonia cretica</i> , <i>Sida cordifolia</i> , <i>Ricinus communis</i> (root), <i>Cedrus deodara</i> , <i>Hedychium spicatum</i> , <i>Adhatoda vasica</i> , <i>Zingiber officinale</i> , <i>Chetulic myrobalan</i> , <i>Piper longum</i> , and <i>Asparagus racemosus</i> ) |
| Purification procedures ( <i>panchakarma</i> ) | Including herbal paste massage, massage with herbalized rice boluses and elimination therapy  |
| Exercise                                       | Yoga exercises and breathing exercises ( <i>pranayama</i> )   |
| Health education                               | Daily classes, including instruction in principles of diet and nutrition, daily and seasonal behavioral routines, and self-pulse diagnosis  |

<sup>a</sup>Herbal products used in the Maharishi Vedic Medicine program are prepared and distributed by Maharishi Ayurveda Products International, Colorado Springs, Colorado.