

Headache Toolbox

Behavioral and Other Nonpharmacologic Treatments for Headache

Medicines provide our chief means of treating headaches – so much so that many people have difficulty thinking of any other strategy. Plenty of nondrug techniques can ease head pain, such as massage, applying cold or heat, rest, and avoiding headache triggers. In fact, people have relied on these and other “alternative therapies” for head pain management for centuries. Early alternatives included faith healing, incantations and superstitious rituals, bloodletting, poultices, and many more.

Today, we are fortunate to have a host of proven prescription and nonprescription medications at our disposal that can be quite effective for treating headaches. So why use non-pharmacologic alternatives? Nondrug therapies often are well suited for those who experience side effects with medications, have other medical conditions that prohibit medications, or have an inadequate response to medications. Some people have preference for nondrug treatment, and women who are pregnant, planning pregnancy, or nursing should limit or avoid medication use. People with medication overuse or high-stress levels also benefit from nondrug approaches that emphasize lifestyle and behavior changes. When discussing nondrug treatments, we often prefer the term *complementary therapies* to highlight that nondrug therapies need not be used in place of medications. Rather, drug and nondrug treatments should be combined for added benefit.

Headache is not merely a problem of the body or the mind but rather a biopsychosocial disorder – a physical disorder subject to psychological, social influences, and environmental stressors. Moreover, chronic headache is a

complicated problem that involves pain and suffering and can interfere with family, social, vocational, and emotional functioning. Frequent and severe headaches are especially likely to cause these problems. So it is important to apply multiple forms of intervention to completely address the problems caused by headache.

PROVEN BEHAVIORAL THERAPIES

Hundreds of scientific studies have shown behavioral therapies for headache yield substantial headache improvement (on par with preventive medications), and that treatment gains typically endure after treatment without the need for additional therapy. Based upon exhaustive literature reviews, a multi-specialty consortium (including neurologists, family physicians, internists, emergency physicians, among others) recently concluded four different behavioral treatments are scientifically sound options for migraine prevention:

- Relaxation training
- Temperature biofeedback (for hand warming) combined with relaxation training
- Electromyographic (EMG) biofeedback (for muscle tension reduction)
- Cognitive behavior therapy (stress management training).

Authoritative literature reviews show similar support for behavioral treatments for tension-type headache (except that EMG biofeedback typically is used instead of temperature biofeedback). Research also indicates that for both migraine and tension-type headache, the judicious combination of headache medications and behavioral therapies

provides better outcomes than the sole use of either therapy alone.

The effectiveness of behavioral headache therapies is underscored by the numerous professional associations that endorse them (eg, US Headache Consortium, World Health Organization, National Institutes of Health, American Medical Association, American Academy of Neurology, American Headache Society).

DESCRIPTION OF BEHAVIORAL THERAPIES

Relaxation training focuses on helping patients modify headache-related physiological responses, reduce arousal of the nervous system, and decrease muscular tension. A common training procedure (progressive muscle relaxation) teaches patients to achieve a relaxed state through a series of muscle exercises and controlled breathing. Relaxation training gives a patient increased awareness and control of biological changes that can cause headaches.

Biofeedback training uses special monitoring devices that help patients learn to control headache-related physical responses. Biofeedback devices measure and then “feed back” information about the physical response to the patient. EMG biofeedback can help patients learn to reduce muscular tension, and hand-warming biofeedback can help patients learn to reduce nervous system arousal.

Cognitive behavior therapy or stress management training helps patients identify their unique behavioral risk/trigger factors for headache (often including stress, sleep disruption, and skipping meals) and then to develop strategies to minimize the impact of their triggers. Learning to recognize and cope more effectively with headache triggers often assists patients to prevent headaches and reduce headache-related disability.

OTHER COMPLIMENTARY THERAPIES

There are other “tried and true” therapies practiced widely in the United States that eventually may be proven effective for head pain management. These include acupuncture, chiropractic therapy, hypnosis, and physical therapies. While research and clinical experience provide evidence that these treatment approaches can benefit headache sufferers, the science is yet inconclusive – mainly because too few well-designed studies provide the evidence needed to conclusively establish their indications and effectiveness.

Although the complimentary therapies listed here seldom are harmful, they also are not completely harmless (especially in the hands of unqualified practitioners), and they are not without cost. It’s an excellent idea to consult with your physician about complementary therapies. Be certain *you* know your headache diagnosis, and be sure that the unlikely possibility that your head pain is due to a life-threatening illness has been ruled out. In this day and age, most physicians are open to consideration of complementary treatments. Don’t hesitate to ask your physician about referring you to a qualified professional, and invite your doctor to help coordinate your program of care. In fact, “complementary care” – the rational combination of established drug and alternative therapies – typically yields the best outcomes for patients with stubborn headaches.

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