

PAIN MANAGEMENT

Characteristics of Pain Millions of Americans suffer from chronic pain which is one of the nation's most serious and baffling health problems. While many people focus on their back, their head or other localized sources of pain, there are some specialists who believe that pain could be a disease in itself rather than just a symptom. Every year forty percent of American have acute or chronic pain requiring treatment. All pain, whether acute or chronic is a message carried to the brain by nerves near the surface of the skin or deep within the body. The message is usually a warning of injury, organic disorder, or the effects of stress on the body. Acute pain - which is a sudden onset of brief duration, may be caused by an infection, accident or surgery. Chronic pain which may be the result of a specific condition, does not diminish with treatment and does not go away with the passage of time. As the pain continues, it can affect personal relationships, professional commitments and self-image.

Pain Theory

An understanding of how pain happens is basic to finding more effective ways in dealing with it. There are millions of sensory receptors on the surface of the body and in it that keeps the brain informed about temperature, condition of organs, unusual changes and so forth. These receptors and the brain communicate in a complicated code through a network of nerves located throughout the body. Every nerve consists of bundles of fibers which can be categorized as large and small bundles. The large bundles carry impulses related to touch. The small bundles send messages slower than the large ones and carry pain impulses. Both sets of bundles meet at the spinal cord. Scientists believe that there is a gate-like mechanism in the spinal cord that can shut against pain messages. Relief associated with electrical stimulation or acupuncture may be the result of the pain gate being closed by using these methods.

Pain Categories

Pain specialists have separated pain sources into six categories. These include:

- * Joint and muscle pain, which account for the majority of patients attending pain clinics.
- * Causalgia (ko-zal-je-a), which is the burning pain that follows a bullet wound or some other sudden shock to the nervous system. This type of pain is likely to go away within a few months, but in some cases, it could continue for years.
- * Neuralgia (noo-ral-je-a), which originates in the peripheral nerves is triggered by cold air, chewing or stress.
- * Phantom limb pain, which may originate sometime after an amputation is a mild sensation of "pins and needles" that turn into shooting pains that continue for years.
- * Vascular pain is associated with dilated blood vessels around the brain that cause migraine headaches.
- * Cancer pain is the result of destruction of tissue or blockage of major organs by a growing tumor, or spread of certain cancers that reach the spine and press on nerves.

Perception of Pain

Some people seem to be more sensitive to pain than others, and different people respond differently to different kinds of pain. In almost all cases, loud music or intense physical effort can override the pain messages. On the other hand, the intensity of pain can increase during fatigue, depression, or anxiety. Experiments have shown that the pain threshold can be raised not only by distractions, but by such techniques as hypnosis or meditation. A study on the chemistry of pain indicates that men are less sensitive to pain than women while older people

are less sensitive than young. Many responses to pain are learned through cultural or parental patterns, and individual character traits have a great deal to do with susceptibility to chronic pain syndrome.

Acupuncture - Pain Relief Method

Many Western scientists remain skeptical about the validity of acupuncture as a therapeutic discipline, there is some evidence to indicate that the technique stimulates the release by the brain of endorphins (en-door-fins), naturally occurring painkilling chemicals, into the bloodstream. Acupuncturists use stainless steel fine-gauge needles inserted and rapidly rotated, and is sometimes combined with electrical stimulation. This stimulation is done at specific pressure points in the body.

Anesthesia - Pain Relief Method

Local anesthesia in the form of cocaine derivatives is used to deaden sensation. It is most frequently used in dentistry, although it may also be used on a short-term basis in back pain and to treat accident patients. It has limited long-term application, but it may be practical for alleviating the acute pain of certain neuralgias (noo-ral-je-as) or bursitis (burr-si-tis).

Behavior Modification - Pain Relief Method

This is a form of therapy that has is uses with people for whom chronic pain has become a way of life. It's also for those who use their pain as a way of gaining control over others. It's based on the assumption that many symptoms that started as authentic pain have become a habit that needs to be unlearned. People whose lives are closely involved with the patient are usually asked to participate in the therapy. Behavior modification is usually one of the many approaches used in pain clinics.

Biofeedback - Pain Relief Method

This is a technique that requires an intensive practice in concentration in which patients learn how to control certain involuntary body processes such as constriction of blood vessels. By mastering this method, patients can reduce the chronic discomfort of vascular headaches and some types of stress-induced muscle tension.

Chiropractic - Pain Relief Method

This is a treatment based on the idea that most disorders results from pressure on the nerves caused by the faulty alignment of the spinal vertebrae (ver-ta-bray). Manipulation of the spine is the main technique. However, where problems of the spine itself are not the source of the chronic pain, chiropractic treatment has not proved relevant. Chiropractors are licensed to practice in most states.

Electrotherapy - Pain Relief Method

Electrotherapy seems to have an effect on the larger nerve fibers that either short circuits messages of pain, or that stimulates the release of endorphins (en-door-fins). The compact easy-to-use equipment can be operated by the patient as necessary. It's reported to be helpful in reducing chronic neck, shoulder and lower back pain.

Exercise - Pain Relief Method

Most chronic lower back pain is alleviated by strengthening particular muscles. Exercise such as swimming that induces relaxation can be helpful in alleviating stress-induced pain such as headaches, and regularly schedules running is known to stimulate endorphin (en-door-fin) production in the brain and is responsible for a gratifying

"high". The very fact that exercise provides distraction, and in some cases, acute discomfort, increases its effectiveness as an antidote to certain kinds of pain.

Hypnosis - Pain Relief Method

There seems to be no general agreement about how or why it works, but hypnosis is not a generally accepted method of controlling and reducing pain. All hypnosis is self-hypnosis in the sense that the subject has decided to concentrate on producing a mental state that will diminish anxiety and suffering. When it does work, it has the advantage of being free of unpleasant side effects not matter how often it is used.

Massage - Pain Relief Method

People who suffer from acute pain are rarely free of anxiety and can benefit from the relaxing results achieved by a competent manipulation of tight muscles. One technical explanation for the effectiveness of massage is this -- if you bombard the nervous system with impulses from the periphery (purr-if-ury), you interfere with other impulses. Masseurs must be licensed in most states, and referral by a doctor or hospital insures reliability.

Medication - Pain Relief Method

Painkilling drugs range from over-the-counter medications such as aspirin and acetaminophen to powerful narcotic analgesics. Some painkilling drugs work through the central nervous system to alter local pain perception. Others act as muscle relaxants, and still others alter a body process. Examples of the latter are drugs that inhibit the body's release of hormone-like substances that are thought to contribute to certain types of pain. These drugs, commonly called non-steroidal anti-inflammatory agents, are now prescribed to treat arthritis and other musculoskeletal (musculo-skeletal) pain, menstrual cramps, and certain inflammatory disorders. Doctors have long been aware of the placebo effect -- the beneficial results to many patients of providing the equivalent of sugar water as medication. It has recently been discovered that when a placebo is taken by a patient with the anticipation of benefit, this state of mind triggers the release of endorphins (en-door-fins). Some specialists go so far as to say that discreetly administered placebos provide pain relief to about one-third of the population.

Meditation - Pain Relief Method

One of the most popular self-help techniques of recent years for the alleviation of pain is meditation. Like biofeedback, this enables people to gain control over their body states once they've mastered the discipline. The positive results of diminishing pain and pain perception through this altered state of consciousness is yet another indication of the relationship between brain, mind and body.

Psychiatry - Pain Relief Method

Pain presumed to originate in the stress of emotional conflicts is called, function or psychogenic (sy-col-genic) pain. It's just as real and distressing as pain that has an obvious cause. Most often, function pain has a component of anxiety or suppressed anger that leads to constant and immobilizing headaches or tight muscles causing neck and shoulder problems.

Surgery - Pain Relief Method

One of the oldest procedures for surgical relief of pain is a chordotomy (cord-o-tomy), in which certain nerve pathways are cut or sectioned off. This is now considered the treatment of last resort and is usually reserved for certain types of neuralgia (noo-ral-je-a) or the burning pain that follows a shock to the peripheral nervous system.

Pain Clinics

Since 1960, when the first pain clinic was established at the University of Washington in Seattle, similar comprehensive treatment centers have been organized all over the country. Most of them are attached to hospitals and call on the services of many specialists. Seattle's Dr. John Loeser has pointed out that the "overwhelming majority of chronic pain patients need to have their whole lives examined." To accomplish this may require the combined expertise not only of particular medical doctors but also of neurologists, orthopedists, psychiatrists, physical therapists, and psychologists skilled in training the patient in techniques of self-help. Anyone wishing to investigate the services of a pain clinic should ask the family physician for a referral or contact the director of the department of anesthesiology at a hospital attached to a university medical school. While many specialists have come to think of chronic pain as a disease in its own right requiring treatment, patients who wish to attend a pain clinic should find out if the costs, which may be considerable, are covered by the terms of their health insurance policies.