

# Combining Technology with Tradition to Effect Superior Pain Management Strategies

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## INTRODUCTION

*“Pain is a very good servant but a bad master.”*  
- Author unknown

Everybody knows what pain is, but no one really knows how to switch it off, especially when it becomes persistent and annoying.

*Pain is not just from physical disorders but also from combinations of physiological, pathological, emotional, psychological, cognitive, environmental, and social factors. The keys to successful pain control are the mechanisms that initiate and maintain pain. ... Now, the public and health professionals expect to control pain by using preventive and active strategies, including drugs and physical and psychosocial interventions.* (Holdcroft & Power, 2003)

Have we lost sight of the real pathophysiology that underlies the phenomenon of pain? Are we concentrating on the end point rather than the cause of the malady? Drugs and physical therapies don't have all the answers to pain management. Is there another way? Maybe we should take a broader look at why the pain started in the first place, and then we can work out the solution to the health challenge.

## BACKGROUND

Pain arises when a living tissue is injured, and the tissue responds with inflammation. Inflammation involves a cascade of events involving cells, enzymes, cytokines, chemokines, and other substances, which will initiate other secondary responses by other cells and blood vessels. Inflammation is the beginning of the process of repair and healing. Ancient civilizations used various modalities to manage pain. They used physical therapies, medicinal foods, and herbs where appropriate.

Over the past century, pain and its management have changed dramatically. In this chapter, I propose to discuss the reasons for the change in pain experience and will explore the practical aspects of pain management using the best from the East and West. While scientists are dwelling deeply on the complex issues of pain and inflammation, patients in pain need help and advice now. Drugs alone cannot relieve all pain and suffering; surgical and psychological treatment may help some, but for most, a holistic approach may help to reduce or relieve the pain and suffering.

## MAIN FOCUS OF THE CHAPTER

*“We are what we eat.”*

If we supply our body with inappropriate or inferior quality materials, the tissues and structures so made will be of inferior quality. Deficiency diseases like scurvy and rickets have been known to cause deformed tissues and cause pain with different characters. By correcting the deficiencies, these maladies can be cured. In our modern society, it seems that more people are experiencing and suffering from pain. Is it because the newer generations are made of “weaker” materials, or is it that the pain threshold is reduced or the background inflammation in the body system has heightened? The fact that we have not been able to quantify and identify the missing ingredients in chronic pain should not deter us from searching for an answer by going “back to basics.” Our body is created to function efficiently and effectively when it is provided with all the nutrients it needs.

## MODERN MEDICAL MODEL OF PAIN MANAGEMENT

In modern medicine, pain is treated with analgesics and nonsteroidal anti-inflammatory drugs. If pain persists,

stronger narcotics and anti-inflammatory corticosteroids are used. Other drugs like antidepressants and anti-epilepsy drugs often are used in pain clinics to help modulate the pain experience. Unfortunately, all these medications have unwanted side-effects. There is a growing awareness in the community that drug therapy is not the only way. People are looking for more natural alternatives and less harmful treatment modalities with more self-help involvement. They want to participate actively in the healing process. People are turning more and more to alternative and natural therapies such as physical therapies, (e.g., physiotherapy, osteopathy, chiropractic) with stretching, mobilization, manipulations, heat/cold packs, and acupuncture/acupuncture-related techniques, along with diet and nutritional supplements, to help manage their painful conditions.

## **TRADITIONAL MEDICAL MODEL OF PAIN MANAGEMENT**

In traditional Chinese medicine (TCM), diseases develop when the flow of Qi (energy, prana, life force) is blocked or interrupted. The basis of TCM treatment is to reestablish the flow of Qi. The TCM practitioners use needle acupuncture and/or herbal remedies to alter or reestablish the flow of Qi to reestablish homeostasis in the body (Chinese acupuncture and moxibustion, 1990; O'Conner & Bensky, 1983).

The Qi or Life Force is also derived from the air we breathe and the water and food we drink and eat. Proper breathing and nutrition form part of the total management in TCM to help bring the body back into balance. It is well known that the food we eat determines how we feel. There are certain foods that will initiate or aggravate the painful situation. Food sensitivities and intolerance can trigger inflammatory response and cause pain (Author's clinical observation and treatment protocol).

## **ALTERNATIVE THERAPIES**

### **Acupuncture, LLLT, & TENS**

Since 1974, acupuncture has been an accepted treatment method in pain clinics around the world. There is only one slight drawback with acupuncture. Not many people, given a choice, would like to have needles stuck

into them. So scientists did intensive research for a noninvasive acupuncture-point stimulation methods. In the East, traditional health practitioners used manual massage—Shiatsu, AnMo, and Tui Na—to stimulate the tissues and acupoints. Scientists discovered two modalities that can stimulate acupoints through the skin without inflicting pain by using Low Level LASER Therapy (LLLT) (Oshiro & Calderhead, 1990; Wong & Fung, n.d.; Baxter, 1994) and Transcutaneous Electrical Nerve Stimulation (TENS). Both these techniques are well accepted by the patients, as needles are not used. There is evidence that these methods of acupoint stimulation may give some of the benefits of needle acupuncture treatment. Although TENS was introduced more than 30 years ago as an alternative therapy to pharmacological treatments for chronic pain and in spite of its widespread use, the effectiveness of TENS is still rather controversial. A meta-analysis was carried out by scientists in 2001, and the results were published in the *Cochrane Database Systemic Reviews*, which showed that there was no evidence to support the use of TENS in the treatment of chronic low back pain, while the results for chronic pain were inconclusive.

Convention TENS stimulation has its limitation because of habituation from repetitive monotonous stimulation over the same points (Godfrey, n.d.; Carroll et al., 2001; Milne, et al., 2001). However, the Canadian research scientists were able to overcome this habituation by using a novel machine called Codetron<sup>®</sup>, which uses six negative electrodes and one positive electrode. At any one time, a pair of electrodes is stimulated. The sequence of stimulation is randomized so the brain will not filter out the stimulation and will accept each individual stimulation as a novel one. Controlled studies were done comparing Codetron with Sham Codetron therapy (Fargas-Babjak, Rooney, & Geretz-Simon, n.d.) and Codetron with Electroacupuncture (Richard & Cheng). The findings were very favorable toward Codetron therapy.

## **DIET, NUTRITION, AND PAIN MANAGEMENT**

In recent years, many reports have been published stating that certain types of food cause or aggravate arthritic or rheumatic pain. Childers and Margoles (1993) in their article "An Apparent Relation of Nightshades (Solana-

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