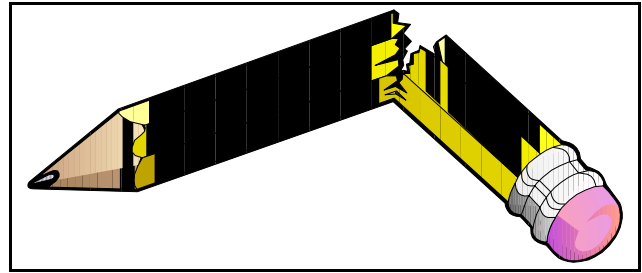


WHY DO WE HURT?

Science continues to unravel mysteries about the pain process. We now know that there are many types of pain usually categorized as acute pains and chronic pains, and that there exists a variety of complex pain control systems within each one of ourselves to help us deal with these pains. We also know that the ability to perceive pain is a life saving necessity.



The few people who are born without the ability to perceive pain die at a very early age often because their nervous system does not give them early warning signs of danger such as with scalding water. Pain is a symptom and it is also a vital component of the human experience.

Biologically, pain is a signal that the body has been harmed

Psychologically, pain is experienced as emotional suffering

Behaviourally, pain alters the way a person moves and acts

Cognitively, pain calls for thinking about it's meaning, its cause, and possible remedies

Spiritually, pain is a reminder of morality

Culturally, pain has been used to test people's fortitude or to force their submission

WHAT IS ACUTE PAIN?

Acute pain is a pain that usually has an identifiable source and cause. People recover from acute pain in a finite and reasonably limited time span . Anxiety or fear may be experienced at the onset of pain, but this should diminish as the problem is identified, treatment begins, and the recovery proceeds.

WHAT IS CHRONIC PAIN?

Chronic pain occurs when the pain mechanism itself goes awry or when certain diseases associated with pain become chronic for unknown reasons. This results in unrelieved pain, and the symptom itself becomes a disease. Chronic pain is often defined as a pain that lasts longer than six months, and is commonly associated with multiple biological, psychological, and sociological consequences.

Some examples of chronic pain are; headaches, back or neck pain, interstitial cystitis, diabetic neuropathy, fibromyalgia, and rheumatoid arthritis.

Chronic pain involve processes that take place in the peripheral tissues such as nerve irritation, muscle spasm, inflammation, and in the central nervous system's spinal cord and brain. It has been shown in scientific studies, that when the spinal cord is bombarded with persistent, high levels of intense pain signals, changes that perpetrate and spread the area of pain can occur in the spinal cord. These areas, responsible for pain modulation in the spinal cord, eventually lose their ability to respond to the normal check and balances which serve to dampen or modulate the pain, and act independently to perpetuate the pain signal.

The brain gives meaning to the pain messages. Conditions such as insomnia, depression, anxiety, and the use of narcotic/sedative drugs or alcohol can impair optimum brain function and can exacerbate the pain experience. And the experience of pain is influenced by cultural attitudes. The Western attitude has created a subtle, highly influential attitude towards the treatment of pain with "quick fixes" and medications to solve the problem. Unfortunately, these treatment styles do not help with long term coping mechanisms for managing the pain, and learning for yourself what to do to make your life healthier and happier.

Chronic pain is a mind-body connection. The chronic "stress" of pain is associated with both physical and emotional symptoms. Humans are biologically prepared with an automatic response to the perception of threat or danger called the "fight-or-flight response", which causes the release of adrenalin from the sympathetic nervous system and other hormones such as cortisol and growth hormone. The changes in your body such as increased heart and breath rate, increased blood pressure and changing of blood flow to the muscles, caused by the fight or flight response are meant to be a temporary coping system for meeting the challenge of threat of danger. When you are chronically stressed such as in a chronic pain state, the body is extended beyond its capacity for re-establishing balance. The recuperative abilities are exhausted and contribute to numerous symptoms such as:

- reduced immunity to disease, diarrhea and/or constipation, sleep disturbance, anxiety fatigue, headaches, poor concentration, shortness of breath, weight loss or gain, increased muscle tension, depression

HOW CAN CHRONIC PAIN BE TREATED?

The most successful approaches to treating chronic pain are programs that are multifactorial in nature and help to teach the chronic pain sufferer a variety of self-treatment and coping mechanism. Treatments such as acupuncture, Tens, massage, and other physiotherapeutic modalities help with the physical tissue symptoms of inflammation, spasm, and irritations, and help with pain control. Relaxation training such as breathing exercises and meditation, stress management and coping techniques, lifestyle readjustment and management, good nutrition, ergonomic advice and counselling are other important areas to explore and learn. Medications used to modulate pain and inflammation are useful and should be monitored regularly by the patient's physician. And participation in a regular, progressed and balanced exercise program is important for stimulating production of endorphins (the bodies own natural pain killers), to stimulate physical relaxation, and to increase the strength, flexibility and conditioning of the body. At Fitness Physiotherapy we have a variety of programs available to help you learn and manage your chronic pain in conjunction with your other care givers.

Further reading can be found in the references listed:

Caudill, Margaret, M.D.PhD Managing Pain Before it Manages You. The Guilford Press. New York 1995

Corey, David Dr., Pain Learning to Live Without It . MacMillan Canada, Toronto 1993

"Movement is Life. Without movement, Life is unthinkable....." Moshe Feldenkrais