

## The relationship between chronic pain and anxiety

Everyone understands the burning pain of a hot plate, the stinging pain of a paper cut and the stabbing pain of a headache. These pains come and go relatively quickly, and our bodies resist and relax respectively. Chronic pain, however, is unlike these examples of acute pain. Chronic pain may be burning or stinging or stabbing; the difference is chronic pain does not climax and disperse, but rather it remains a relentless presence in our bodies and minds.

Likewise, anxiety is a normal emotion that everyone has during moments preceding or moments of performance or conflict. Anxiety can trigger our *fight or flight* response to save us from a dangerous situation. When anxiety persists, however, or appears without a concrete rationale, it can be considered chronic anxiety or an anxiety disorder.

Pain is generated as nerves in muscles, joints or other tissue send a message to the brain that attention must be paid: “Don’t bend that way!” “Stop moving!” or “Don’t lift and twist!” may all be among those messages. Pain is an indication of danger – danger that a body part has been or is about to be abused or pushed beyond capacity.

In the pattern of chronic pain, anxiety can be both a cause and effect – hence the phrase “pain cycle.” Unlike pain, anxiety is not a *message* of danger, it is an *anticipation or fear* of danger. The relationship can begin when we have pain, which in turn may cause anxiety, perhaps from the fear of continued pain, the fear of not recovering, or perhaps the fear of not meeting responsibilities. On the other hand, the relationship can begin when we have anxiety, perhaps from relationships, from work, or from finances, and this anxiety manifests itself in the form of tight muscles, upset stomach or backache – or more simply – pain.

What may happen to our **bodies** during the cycle of pain and anxiety?

- Perspiration
- Elevated heart rate
- Rapid breathing
- Sleeping too much or too little
- Eating too much or too little
- Upset stomach
- Muscle aches
- Tension/stress/muscle tightness
- Nausea
- Memory loss

What may happen to our **mind** during the cycle of pain and anxiety?

- Worry
- Self-doubt
- Panic
- Focus on negative possibilities
- Focus more internally than externally

Once the cycle begins, the pain and anxiety create overlapping messages to our central nervous system. The nervous system is the most important common denominator of pain and anxiety. As messages overlap, the nervous system enters a constant state of reactivity. The more stimulated the nervous system becomes with messages of danger, the more protective it demands the body become. After receiving messages of danger, the brain returns messages to the body to guard muscles, create comfort in the form of medicine, food or sleep, and even avoid external stimulation such as going outside. The nervous system develops a heightened state of awareness that normally protects us from danger, but channels that energy into thinking more about our pain, worrying, and protecting ourselves from stimulation. The central nervous system is not designed to live in a state of heightened anxiety; this prolonged hyperactive state can lead to stress, hypertension, and other distress.

In addition to addressing the origin of the pain, a physician may recommend a variety of strategies to alleviate anxiety including exercise, medication, massage, acupuncture, meditation, proper nutrition, and/or cognitive therapy.