

# Introduction to Chronic Pain

## How are you feeling?

You have pain that just won't go away – an earache without an infection, a toothache without obvious causes, a daily headache, you can't open your mouth wide, or you have ongoing jaw pain. You suffer every day of your life. You've been to the doctor and dentist but your pain seems resistant to every effort.

You've probably become very frustrated with the intrusion of pain in your life. You're tired of feeling like a hypochondriac – as if you were making up symptoms to get attention. You're worried about the costs in the form of time, money, and missed workdays.

You are worried about cost of healthcare, but you should be more focused on the cost of not treating your pain timely or appropriately. Did you know that in the U.S. approximately 700 million workdays are lost each year at a cost of \$60 billion? (2002 figures)

You already know the cost of your pain in interrupting important events – your daughter's wedding, your anniversary cruise, your social events, or your own birthday celebration. Your sexual desire may have died with the pain. Your enjoyment of life has taken a hike. Furthermore, your irritability is at an all-time high. It is hard to know where your pain ends and your life begins. Your pain has, in effect, gained control of you and your life.

Pain is in control of your Life

## Why is my pain so difficult?

You have a chronic pain as compared to acute pain. What's the difference?

- *Acute Pain* is a visual diagnostic, single pathology that last approximately 1 to 4 weeks, and responds well to standard medical care. Example: broken arm.
- *Chronic Pain* is a non-visual multifaceted, intermittent or continuous pathology lasting longer than 1 month in a complex neurological area or deep structure, and it does not respond to standard medical care. Example: tennis elbow.

The medical and dental profession spends nearly 95% of its training time on acute pain. Patients will experience mostly *acute* pains in their life. So, the world is conditioned to acute pain and its fast, quick, and inexpensive aspect.

Acute pain usually develops quickly, has single causes, features moderate pain, is **visually diagnosed**, and responds well to specific medical treatment. Common acute pains include broken bones, the common cold, ear infections, or abscessed teeth. A broken leg or abscess tooth can be diagnosed with a simple x-ray (visual). A simple ear infection or gum infection can be diagnosed with clinical exam (visual). A common cold can be diagnosed with green stuff coming out nose (visual), significant cough (visual), chest congestion (audible), and last only a couple weeks.

Chronic pain, on the other hand, exhibits a whole different set of parameters of pain.

Chronic pain can be continuous or episodic lasting longer than one month. Chronic pain is multifaceted (multiple causes) and involves more than one body structure. Many of these chronic pains occurred in regions where there are a lot of complicated structures (like face with eyes, ears, nose, chewing system) or are deep in the body with less location specificity.

The pain remaining for longer periods of time gives the body time to adapt to the pain, which sets up a whole new problem of recruiting, perpetuating, or adapting the pain system. The pain system as it adapts becomes more resistant to pain reduction, more pain mechanisms get turned on, and other non painful neurological systems change into pain systems.

These chronic pains are not visually diagnostic. Common chronic pains include frequent headaches, frequent neck pain, jaw pain, jaw malfunction (closed lock), fibromyalgia, frequent ear pains without infection, osteoarthritis, facial pain, peri-oral pain, migraines, and chronic tension headache.

### Chronic Pain does not have visual clues

Did you know that 48% of females (as young as 12 years old) have frequent tension headaches (from a chewing, clenching jaw muscle)? You cannot tell if someone has a headache or what kind of headache just by looking at the person. Without the visual diagnostic benefit, the doctor is forced to play bio-detective.

### Obstacles to treating chronic neck and face pain

Pain of the face and neck poses several major obstacles to physicians accustomed to dealing with acute single pains.

1) *The head and neck region is a complex area of the body.*

There are more nerves in one square inch of head/neck tissue than in a square foot of arm tissue. The five senses are packed into this area. The majority of cranial nerves supply this area of the body. There are so many structures in such a confined area that it is difficult to relate a face or neck pain to its source. There are more nerves under one finger on your face than under your hand on your leg.

2) *Persistent pain of the head and neck tends to have more than one cause.*

The pain in the head and neck region is usually comprised of a mixture of pain from different structures. In one study of jaw pain, 87% of the patients also had a neck problem. In order to understand your pain, your doctor will provide you with one most through examinations of head and neck area you have ever had.

Because chronic pain is not visually diagnostic, your doctor often needs to expand his search for clues with a MRI, a CT, diagnostic injections, a clinical trial of medicine, a neurological exam, blood studies, allergy studies, neck x-rays, or a even a new cone beam exam. In other words, a problem that has multiple causes will not have just one test to determine its source.

If an acute pain doctor treats only one area, the chronic pain will still persist. Any resistant pain that persists for more than a month or two should be considered a candidate for a chronic pain classification. Thus, you need to see a chronic pain specialist.

**Without visual clues, diagnosis requires your data and details**

3) *The source of the pain may be different than the site of the pain.*

The deeper muscles and tissue layers of the head and neck are not as location-specific as the superficial structures. This can cause a person to feel an “earache” that is actually neck or jaw muscle referred pain.

4) *Pain can persist entirely separate from its original source.*

After long periods of time with pain, the pain system becomes turned on and will not turn off. The pain system becoming turned on happens over a period of time and is reversed by small degrees. Your biggest concern should be long-standing pain that cannot be turned off.

The ability to reduce or eliminate pain is greatly reduced once this “central sensitization” phenomenon is set into motion. This “central sensitization” causes the second and third-level nerves become active without the original source of pain. These second and third level nerves are not active in acute pain.

The best illustration of this phenomenon is known as “phantom limb pain” where an amputee feels pain in a toe that he no longer has. The phantom limb phenomena is not isolated to a lost limb, it is a biological process set in motion by any chronic pain. This process should “scare the devil out of you” as the country boy would say.

5) *Stress increases chronic pain not acute pain.*

Stress has no effect on acute pain in a normal individual, but it will increase pain in a chronic pain patient. For example, a person that stubs their toe does not increase their

pain if they are stressed. However, a person with chronic jaw pain will have an increase in pain with an increase in stress.

How does this happen? Why is it that in two people given the same set of life stressors, one will suffer an increase in pain and the other will not? And why is it that one person can handle a certain stressor one year but the next year the same stressor causes unbearable pain? Rest assured, stress does create and aggravate real pain. This is difficult to answer, but consider an oversimplified view based on the latest in science.

When you have an acute injury, such as sunburn, the nerves deliver the message to the brain by sending a signal of pain. Everyone knows that the body is wired with a central nervous system pain system and control system (autonomic) which can be divided into sympathetic (fight or flight) and parasympathetic system (rest and replenish).

What most people don’t know is that the sympathetic system (stress system) becomes activated in response to chronic pain. When your sympathetic system is activated, it sprouts and attaches to the pain system. The more the inter-connection of the sympathetic system to the pain system, the more your pain increases in response to stress.

The adaptive response of the body to pain is much more complex than this, but this example gives you a snapshot of understanding of one of your biggest concerns: the cost of healthcare. It’s not how much they charge, but how stubborn your pain is to treat. How hard your pain is to treat is related to how long it takes you to find and implement the appropriate chronic pain therapy and proper diagnosis of the chronic pain directing care in right direction.

## Need to understand

With the visual aspect of chronic pain diagnosis all but non-existent, we, the diagnostician, must have detailed knowledge about you, your pathology, the evolution of the pathology, and the clinical presentation. We need all the pieces of the puzzle due to the area of complexity that we deal with in the head and neck area; due to the multiple causes of the pathologies, due to the crossover of pain from the sympathetic system, and just due to the complexity of humans.

In chronic pain, it is not an advantage for you to think that doctors can know what is wrong with you in a few minutes. It is not appropriate for you to play the game of “guess what is wrong with me.” This implies no sharing of your knowledge with the doctor and hoping he can accurately determine what is wrong. Guessing with your health is like thinking you know the winning lottery numbers.

Some pathologies are revealed more with the description (who, what, where, how), some are more revealed in the evolution of the pain (when), some are more understood by the clinical, and some need all three areas. When your doctor asks you to give a lot detail in your reporting of symptoms and the evolution of the pain, similarly to a detective conducting an criminal investigation, hopefully you now better understand why he has to ask all these questions.

Communicate all your details to help us diagnose the source of your pain.

## Beating Chronic Pain: The Treatment Paradox

One of the goals of chronic pain therapy is to get you pain-free for 30 days in order to reverse the adaptive pain system process. This pain-free period usually follows a treatment period of at least 30 days. At the Raleigh Facial Pain Center we know that your time demands are already stressful, and we regret that we are about to increase them due to the necessity of appropriate chronic pain therapy with its multiple treatment providers.

The sad truth is that chronic pain has no respect for your time and money conflicts. If you are to get better, we must do what has proven successful for all who have gone before you. This is not like a “cafeteria” where you pick only the treatments that are convenient, inexpensive, or easily approved by your insurance. You must hit chronic pain with all the energy, effort, resources, and vigor you can muster. You will need to delay, transform, delegate, and eliminate all barriers during the wellness journey of 2-3 months. This means dedicating the next two to three months to “recovering” from chronic pain as if you were recovering from major surgery.

Make it your highest priority for just two to three months (four months if you have fibromyalgia, severe joint damage, or significant anxiety or depression). If you decide *not* to do this, you are making a conscious decision to prolong your pain indefinitely. **If you *do* focus all your mental and physical resources on recovery, the result will be so great that you will never regret it.**

**Wouldn't *you* like to be pain-free?**