



Fibromyalgia, Chronic Fatigue Syndrome, and AMPS

Fibromyalgia, myalgic encephalomyelitis/chronic fatigue syndrome (ME/CFS), and amplified musculoskeletal pain syndrome (AMPS) tend to be difficult to diagnose and treat, and are very frustrating – to put it mildly – for the people that suffer from them. When working with a student with one of these conditions, it is important to be very patient and keep an open mind.

Clinical Somatics exercises can be part of a successful healing approach for these conditions. However, in some cases the exercises may be uncomfortable or painful, simply because the student is already in so much pain and their nervous system is hypersensitive to pain. Encourage your student to listen to their body and proceed extremely slowly and gently.

If your student can do Clinical Somatics exercises comfortably, the exercises can be very effective in reducing their pain and reducing the stress that is often present in these conditions.

FIBROMYALGIA

Fibromyalgia is a chronic nervous system disorder characterized by widespread pain, tenderness, and fatigue. People with fibromyalgia often experience sleep disturbances, morning stiffness, anxiety, depression, and irritable bowel syndrome. The condition is difficult to diagnose because most of the symptoms mimic those of other disorders.

Fibromyalgia is a disorder of the nervous system. It is not considered an autoimmune disease because it does not produce autoantibodies, cause inflammation, or harm bodily tissues. However, it can often occur along with autoimmune, rheumatic, and endocrine diseases.

How is fibromyalgia diagnosed?

Muscle pain and fatigue are the two most common symptoms of fibromyalgia. Traditionally, fibromyalgia has been diagnosed based on sensitivity to touch at 11 or more out of 18 specific tender points on the body. However, in 2010 a new diagnostic approach was adopted that will likely lead to an increase in the number of people diagnosed with the condition. The new criteria are based on how widespread the pain is combined with the severity and duration of the symptoms.

There are a number of medical conditions that mimic fibromyalgia, and when pursuing a diagnosis it is essential to rule them out.

Anemia
Arthritis
Autoimmune connective tissue disorders
Blood sugar abnormalities
Cancer
Chemical and food sensitivities
Chronic fatigue syndrome
Disc and joint degeneration
Endocrine imbalances
Hypothyroidism
Intestinal infections
Lyme disease
Mitochondrial dysfunction
Multiple sclerosis
Muscular pain
Nutritional deficiencies
Pinched nerves
Reactions to medications
Rheumatic auto-immune disorders such as rheumatoid arthritis or lupus
Sleep apnea
Small fiber polyneuropathy

What are the symptoms of fibromyalgia?

- Widespread muscle tightness and joint pain
- Muscle tenderness, soreness, twitching, or spasms
- Burning or pins and needles sensations
- Tender points in specific areas of the body
- Hypersensitivity to cold or pain
- Insomnia
- Fatigue
- Headaches
- Difficulty with memory and concentration, referred to as “fibro fog”
- Feeling nervous, worried, or having mood swings
- Disorders including anxiety, depression, and post-traumatic stress disorder
- Digestive symptoms including constipation, nausea, or passing excessive amounts of gas

Who gets fibromyalgia?

Fibromyalgia affects about 10 million Americans, and between 75% and 90% of fibromyalgia patients are women.

Women likely suffer from fibromyalgia more than men at least in part due to hormones. Estrogen, the female sex hormone, is protective against pain. But women's estrogen levels fluctuate throughout the month, and fibromyalgia sufferers report more pain during times of the month when their estrogen levels are low. Testosterone, the male sex hormone, also protects against pain. But women have a small amount of testosterone compared to men, and men's testosterone levels don't fluctuate the way women's estrogen levels do.

Social stigmas may also contribute to the higher rates of reported cases of fibromyalgia in women than in men. Men are less likely to go to the doctor when they experience pain because they don't want to appear weak. Also, doctors often overlook fibromyalgia as a possible diagnosis in men because it's thought of as a female problem.

What causes fibromyalgia?

One cause of fibromyalgia is psychological stress. Onset can sometimes be attributed to a specific stressful incident, such as an injury, surgery, car accident, or physical attack. Fibromyalgia can also develop gradually. Ongoing emotional or physical trauma may cause injuries or chronic muscular tension and anxiety that over time leads to chronic pain.

Fibromyalgia sufferers have been shown to be more vulnerable to the negative effects of stress, have impaired and maladaptive coping mechanisms, be more likely to catastrophize, have higher levels of neuroticism, and have higher rates of anxiety, depression, and PTSD.

Chronic functional pain resulting from a recurring injury or poor posture and movement can also be very stressful and prevent restful sleep. So, fibromyalgia can actually begin with run-of-the-mill back pain or joint pain.

Fibromyalgia can also begin with an infection, which is interesting because researchers believe that the immune system is not involved in fibromyalgia. And yet other things which trigger an immune response, like toxins and certain foods, are also reported to cause or contribute to fibromyalgia.

Researchers believe that in fibromyalgia, the brain's pain receptors become hypersensitive to pain. This means that the receptors overreact to pain and create the sensation of more pain than should actually be occurring. This likely involves abnormal levels of certain neurotransmitters.

In my personal opinion, fibromyalgia is not one condition, but a collection of symptoms that can result from a number of different factors. So, the causes vary from person to person, the symptoms vary, the physiological imbalances causing the symptoms vary, and the lifestyle changes that ultimately provide relief will vary.

How is fibromyalgia treated?

Over-the-counter pain relievers, antidepressants, and anti-seizure drugs may be prescribed for fibromyalgia. Narcotic pain medications are not advised, because they can lead to dependence and may even worsen the pain over time.

Full recovery from fibromyalgia typically involves lifestyle changes and gradual improvement over time. If you have a student with fibromyalgia, encourage them to be comfortable making baby steps and letting their recovery be a gradual process. They should celebrate every little step toward recovery. It may help them to keep a log or journal to track how they feel day to day, things that trigger or worsen their symptoms, and anything that helps to relieve their symptoms.

Lifestyle changes that can aid in recovery from fibromyalgia are:

1. Using talk therapy to address sources of psychological stress such as abuse, accidents, or loss of a loved one.
2. Reducing lifestyle-related stress by changing stressful aspects of daily life, and doing relaxing practices like meditation, reading, taking hot baths, etc.
3. Releasing chronic muscle tension with Clinical Somatics exercises. There are people who have used Clinical Somatics exercises alone or along with other changes to fully recover from fibromyalgia.
4. Getting regular exercise (in whatever way they can without increasing pain), which balances neurotransmitters, reduces stress, and aids in getting high-quality sleep.
5. Getting outdoors every day - the more the better! Exposure to sunlight increases levels of serotonin and melatonin, both of which tend to be significantly low in fibromyalgia sufferers (contributing to depression and lack of restful sleep).
6. Considering whether toxin exposure or eating certain foods may be causing an immune reaction and contributing to pain/symptoms.
7. Taking steps toward getting a restful night of sleep: commit to a regular sleep schedule, create a restful sleep environment, reduce stress, exercise, get outdoors, and limit caffeine, alcohol, and sugar.

MYALGIC ENCEPHALOMYELITIS/CHRONIC FATIGUE SYNDROME (ME/CFS)

Myalgic encephalomyelitis means “muscle pain (myalgia) related to central nervous system inflammation (encephalomyelitis).” This name has been used since the 1950s, but in the past there has been debate about its accuracy since inflammation of the central nervous system had not been clearly demonstrated. In 1987, the Centers for Disease Control and Prevention (CDC) chose the name “chronic fatigue syndrome” as a more neutral and inclusive way to describe the condition. In 2015, the Institute of Medicine (IOM) proposed that the illness be renamed “systemic exertion intolerance disease (SEID)”, but many patients are not in favor of this new name.

People with ME/CFS typically have severe, unexplained fatigue that is not relieved with rest or sleep. ME/CFS sufferers often must decrease their work and daily activities substantially due to their fatigue. The condition can range in severity, and symptoms can fluctuate in severity from day to day. Some people describe it as being like having the worst flu you’ve ever had – all the time.

What are the symptoms of ME/CFS?

In addition to fatigue, other common symptoms include:

- Post-Exertional Malaise (PEM): extreme exhaustion, pain, feeling sick, and other symptoms that present after exercise or strenuous activity, often not starting until the next day
- Unrefreshing sleep
- Impaired concentration or short-term memory
- Muscle and joint pain
- Sore throat
- Tender or enlarged lymph nodes (swollen glands) in the neck or underarm area
- Headaches
- Gastrointestinal issues

Other health conditions can cause symptoms similar to ME/CFS, including:

- Infection
- Anemia
- Hypothyroidism
- Adrenal insufficiency
- Heart disorders
- Sleep apnea or narcolepsy
- Cancer
- Hepatitis B or hepatitis C
- Major depression, bipolar disorder, and other psychiatric disorders
- Anorexia nervosa and bulimia
- Drug and alcohol abuse

What is the cause of ME/CFS?

An exact cause of ME/CFS has not been identified – likely because there is not just one cause. Different factors may contribute to the onset of the condition in different people. About 70% of cases are preceded by a virus, but it is clear that no single virus is the cause of ME/CFS. Bacterial infections and toxin exposure can also trigger the condition. There have been dozens of reported outbreaks of ME/CFS, most of which followed viral outbreaks, and some of which occurred due to toxin exposure.

Factors that make people susceptible to ME/CFS include:

- Recurrent infections
- Immune deficiency
- Autoimmune conditions
- Toxin exposure
- Genetic predisposition
- Chronic stress, stressful life events, and childhood trauma
- Gut dysbiosis

Reports of full recovery from ME/CFS are rare; a review of 14 studies showed that just 5% of ME/CFS patients experience complete recovery from all symptoms. However, 39.5% of patients improve over time. Symptoms tend to be most severe in the first one to two years, and continued deterioration is not common.

How is ME/CFS treated?

There are no treatments for ME/CFS that have been approved by the FDA.

In the absence of any approved medical treatment for ME/CFS, sufferers of the disease take their healing into their own hands. Many people who report improving their symptoms or recovering describe how they used pacing to help them very gradually increase their activity levels and regain their health.

Pacing involves paying attention to energy level and other symptoms, and only doing what they can do without making their symptoms worse. ME/CFS patients often find it helpful to have planned periods of rest throughout the day. It can take a great deal of willpower and discipline to modify their lifestyle in this way, sticking to what feels like a very limiting schedule. But the alternative – overdoing it and triggering the out-of-proportion intensification of symptoms (post-exertional malaise) – is worse.

Fatigue serves a protective biological purpose: it arises in response to activity that is intense enough to threaten our homeostasis. When we feel fatigue, we slow down and rest in order to let the systems of our body recover. Thinking about fatigue in this way may be helpful for people who suffer with ME/CFS. The fatigue is a signal that their body needs to rest in order to maintain homeostasis and heal. If they can think of resting and pacing as being helpful,

instead of limiting and frustrating, it can at the very least improve their state of mind, and likely aid in their improvement as well.

The focus on pacing as a method of recovery can make it sound like ME/CFS is a psychosomatic condition, but research has clearly shown that it is a physiological illness involving multiple systems of the body and causing many physical symptoms. The reason why pacing is helpful in recovery is simply because slowing down and paying attention to what our mind/body needs allows our systems to gradually heal and return to homeostasis.

Consider what happens when we come down with a virus: we feel tired, and we're forced to take a few days off so that we can rest and allow our immune system to do its job. While ME/CFS is complex and extreme compared to this example, the principle of healing is the same. Our immune system wants to heal us and return the systems of our body to normal functioning, and often it can if we give it the chance. It is up to us to give it the very best possible chance to do its job. In addition to rest and pacing, this may involve stress reduction, changes in diet, taking supplements, spending time outdoors, meditation, and other lifestyle modifications that strengthen the immune system.

If you have a student with ME/CFS, encourage them to read these two posts:

<https://somaticmovementcenter.com/chronic-fatigue-syndrome-me-cfs/>

<https://somaticmovementcenter.com/anayas-recovery-chronic-fatigue-syndrome-me-cfs/>

AMPLIFIED MUSCULOSKELETAL PAIN SYNDROME (AMPS)

Amplified musculoskeletal pain syndrome (AMPS) is an umbrella term for non-inflammatory musculoskeletal pain that is more intense (amplified) than “normal” pain. AMPS is most commonly diagnosed in children and teenagers, and most commonly affects girls ages 11.5 to 15 years. It includes:

- Juvenile fibromyalgia syndrome
- Chronic musculoskeletal pain (CMP)
- Chronic widespread pain (CWP)
- Reflex sympathetic dystrophy (RSD)
- Complex regional pain syndrome (CRPS)
- Reflex neurovascular dystrophy (RND)
- Diffuse idiopathic pain or diffuse amplified pain
- Intermittent amplified pain
- Localized idiopathic pain or localized amplified pain
- Myofascial pain

What are the symptoms of AMPS?

- Pain throughout the body or in one area
- Pain that comes and goes or increases over time
- Allodynia (a painful sensation in response to non-painful touch)
- Disproportional physical disability
- Debilitating fatigue
- Disrupted or non-restorative sleep
- Neuropsychiatric problems, including “brain fog,” anxiety, and depressive symptoms
- Autonomic signs, like elevated heart rate or blood pressure, or changes in skin color or temperature
- Edema (swelling)
- Changes to hair in the area
- Problems with movement, including stiffness, tremors and coordination

What is the cause of AMPS?

AMPS is typically caused by either injury, illness, or psychological stress. Age, genetics, or hormones may also be factors.

In AMPS, pain is believed to be the result of an abnormal short circuit in pain signals. In addition to traveling up the spinal cord to the brain, the pain signal also travels to the autonomic nerves, which control blood flow through the blood vessels. This causes the blood vessels to constrict. This reduces blood flow and oxygen to muscles and leads to an increase in waste products in the muscles. It is believed that the lack of oxygen and acid build-up is the cause of pain in AMPS.

How is AMPS treated?

Depending on pain level, other symptoms, and ability to function, treatment for AMPS is usually a team approach that involves exercise, therapy, and counseling. The team may include doctors, nurses, physical and occupational therapists, child psychologists, music therapists, and recreational therapists. Biofeedback, meditation, mind-body skills, and desensitization are also used. The goal is to re-establish function and address psychological issues, preferably without medication. In the majority of cases (up to 85%), children who undergo intensive treatment make a complete recovery.