

chapter 1

The Truth About Your Pain

Telling people about Mind Body Syndrome is like telling them that the earth is round, when they KNOW that it's flat!

— Anonymous patient

Vitiant artus aegrae contagia mentis.

(When the mind is ill at ease, the body is affected.) — Ovid

It hurts.

Your pain is awful. Your misery is unrelenting. No matter what you do, you can't get rid of it.

You went to your doctor, and he told you that you had a medical condition: degenerative disc disease, spinal stenosis, fibromyalgia, irritable bowel syndrome, whiplash, or something else. Your doctor prescribed drugs. You took them, but they didn't really help. Maybe you had injections or you even had surgery, but that didn't stop the pain, whether it was in your back, your head, your neck, your gut, or all over.

Perhaps you have explored alternative medicine. Maybe you took herbal remedies, had therapeutic massages, or saw a chiropractor. You're considering acupuncture, hypnosis, and even crystals, if that might help. Some of these treatments may have provided temporary or partial relief, but still the pain is there, day after day after day. You might have seen alternative health practitioners who gave you different diagnoses, gave you supplements or herbs, or changed your diet. You've gone to so many health practitioners that you are starting to feel no one can help you because no one understands the real problem. Maybe your doctor even referred you to a psychiatrist or psychologist, suggesting that your pain isn't real—that it's all in your head.

But you know you're not imagining your pain. You're not faking it to gain attention or sympathy. It's about time someone in the medical profession recognized that the pain in your body is real. It's about time that someone in the medical profession told you that there is a reason for your pain and a way to cure it.

I am that doctor, and I'm telling you: Your pain is real, there is a reason for it, and there is a cure for it. The only way to relieve the pain is to find the underlying cause of it, to get to the bottom of it. The problem is not in your head. It's in your diagnosis.

Some doctors may say you have a serious medical condition, but if they don't know how to cure it, their diagnosis doesn't help you. Perhaps alternative health practitioners will tell you that your spine is not properly aligned or your aura is out of whack or your chi is diminished. All of these are different ways of looking at your body, but none of them will succeed if they're not correctly diagnosing why your body hurts.

I have some good news for you. Unless you have a medical problem resulting in clear pathology in your body (which can be determined by routine medical tests), your pain can be cured. Following this program, you can take some relatively easy steps to vanquish it.

Like tens of millions of Americans and countless others around the globe who suffer from chronic back pain, muscle pain, headaches, migraines, stomach pain, and other misdiagnosed conditions, you're hurting because of overly sensitized neural circuits in the brain. These connections have created a vicious cycle of pain that can last for months, years, or even decades unless you do what it takes to stop it. This cycle of pain signals has been "learned" by your brain—and the longer these signals keep firing, the more sensitized and overactive the neural circuits become, and the more pain you feel.

The event that started this horrible pain cycle could have been an injury or a stressful event in your life, or it could have come out of the blue. A very careful and detailed look at your current situation and your life history will reveal how your brain is actually creating this pain and perpetuating the vicious cycle. As I will explain in detail, our brains create the pain that we feel, whether that pain is caused by a serious injury or by stress. Most people and most doctors are not aware of this fact. And, most importantly, since our brains generate pain, all pain is the same, all pain comes from the brain, all pain is real.

The best news is that you don't have to live the rest of your life with this pain. Whether you've had it for a few weeks or for many years, it can be beaten. Just as your brain has learned to make your body hurt, you can use your brain to unlearn the pain. There's a way to retrain your brain so that your body isn't contorted into pain. This book will explain how this can be done without drugs or surgery, by anyone with the motivation to do so.

In fact, if you begin to understand this syndrome and recognize what causes it, you've already

taken a powerful first step. And the rest of the steps, though they require wholehearted commitment, are not difficult. They are all explained in this book, and the whole program is laid out for you to work through. Improvement may occur within days or weeks, even if you've been suffering for a long time. And by doing the program you can get more than temporary or partial relief. You can achieve complete freedom from the pain and distress that have hobbled you.

Starting today, you can break the vicious cycle of pain. And you can start to use your mental energy to overcome your limitations and rebuild your life.

I know this is true because I have done it myself. I've changed my understanding of the source of my pain, and I now can identify when the stresses of everyday life produce pain in my body and I can overcome them.

More importantly, I've seen the same transformation in hundreds of my patients.

This program is not risky or far out. It doesn't require belief in an alternative paradigm of medicine or philosophy. The work of unlearning your pain is based on solid science and common sense.

The Neural Circuits of Pain

Pain begins when circuits from the brain are stimulated or "fired." Over time, these circuits can become "wired" into the brain's circuitry. The brain learns this chronic pain, even though there is no serious medical condition in the body, and even though any injury that may have precipitated the pain has long ago healed.

Everyone knows that if you break your arm, it will hurt, but after the fracture heals in a few weeks, the pain will disappear. But I have seen hundreds of people whose pain began with an injury but lasted five, ten, even twenty years. Why? The body has surely healed. The answer to this puzzle is found in the neural circuits in the brain.

Many people have heard about "phantom limb" pain, the pain that is felt in the area of an arm or a leg that has been amputated. There is clearly nothing wrong with that area—it isn't even there—yet this pain can be severe. We now know that this pain is caused by the creation of neural circuits in the brain.

The good news is that the brain can be retrained to get out of ruts that produce pain and to activate the normal, non-pain circuits that are waiting to be used. An increasing body of evidence is showing that the brain has amazing neuroplasticity—it is always learning and creating new neural

circuits. All you have to do is tap into that power and use it to reprogram your response to pain and to the factors that intensify that pain.

There are three major components of the nervous system that create the vicious cycle of pain: the nerves that send pain signals from the body to the brain; the brain itself, where those nerve signals are interpreted; and the nerves that send signals back to the body. The best way to end chronic pain and other chronic symptoms is by retraining the brain, the controller of the nervous system. Most people don't realize that the brain can both create and cure chronic painful conditions. Unfortunately, there are few doctors who understand this simple fact. Doctors who don't know that learned neural circuits can cause real, physical pain believe that all pain originates from some kind of tissue damage in the body. When they cannot identify the tissue damage, they are perplexed and sometimes blame the patient or doubt that there is real pain. Modern medicine's treatment for chronic pain usually consists of pain medications, injections or surgery. While these may help to some degree by controlling symptoms, they don't get to the root cause of the pain and therefore cannot reverse it. For people with pain caused by learned neural circuits, cutting-edge brain research demonstrates that it is possible to change these circuits and interrupt this vicious cycle.

Stress and Pain

Pain cannot be felt without the brain, which interprets tissue damage signals and can transform them into the experience of pain. Of course, it is important to be able to feel pain so we can protect ourselves from danger. However, these circuits often tend to get reinforced over time by our reactions to the pain. Just about everyone who has chronic pain will react to that pain with fear, anger, anxiety, frustration, and other worrisome thoughts and emotions. These thoughts and emotions trigger increased pain by an "amplification" process in the brain.

Thoughts and emotions, whether we are aware of them or whether they are subconscious, are major factors in producing chronic pain and related syndromes. In addition, the stress that frequently accompanies these symptoms, such as decreased activity, decreased income, and more difficult relationships, adds to the problem by making the stress-producing neural circuits stronger.

In this kind of situation, your brain will continue to produce pain because that's the only way your brain knows how to deal with these stresses. The truth is that your mind can twist your body into a cycle of very real pain.

It is common for people with difficult emotional experiences in their childhood or their recent past to have this same amplification of pain. In fact, certain traumatic experiences in childhood leave an imprint on the brain, making it more likely to develop the vicious pain cycle. People who have a great deal of unresolved stress are also more likely to have chronic pain. Almost everyone has stress to some degree, and in many people it results, sooner or later, in chronic pain that can range from mild and intermittent to intense and unrelenting. And there are many symptoms in addition to pain that can be caused by these wayward connections, such as diarrhea, insomnia, ringing in the ears, fatigue, bladder symptoms, anxiety, or depression.

In fact, this process of the brain generating some sensations or symptoms in the body is simply part of being human. As we shall see, our brain works to protect us from tissue damage by creating pain and it also works to "protect" us from stress and any emotional "injuries" by creating pain or other symptoms as a warning or alarm. Everyone has these reactions even if they are not aware that it is actually the brain that is causing a headache on a stressful day, a stomach ache before giving a public presentation, or a back pain when coming up to an important deadline at work.

And most importantly, this is not your fault. You are not making this up. It is not "all in your head." You are not crazy or weak. You do not want these symptoms. The symptoms you have are real, very real! They are not fake or imaginary. And, the most common cause of chronic pain is neural circuits in the brain. This means that you can get better!

The term I have used for this condition is Mind Body Syndrome, or MBS, and most people have some form of it. There are several other terms that are used to describe pain that occurs in the absence of a physical injury, such as neuroplastic or nociceptive pain syndromes and central sensitization, which are often used in scientific journals. Other commonly used terms are psychophysiological disorders (PPD), mind-body disorders, or neural circuit disorders.

What This Program Offers

In the chapters that follow, you will learn about MBS. You will see how it can develop and why modern medicine is typically unable to solve this problem. Most importantly, you'll learn whether you suffer from this syndrome. And finally you'll be guided through a comprehensive program to cure yourself.

As a benefit of this program, you will attain increased self-awareness and greater understanding

of how your brain works and of what issues in your life may have contributed to your physical pain. Not only do I expect you to be able to cure your pain, but you will be a stronger, more confident, less anxious, and less vulnerable person.

Your pain is real. But you no longer have to put up with it. This book will show you how to heal yourself. The neural circuits causing the pain can be retrained by understanding what triggers them and what amplifies them. In order to do this, we must look more closely at the brain and how it is affected by pain and by stress, and how it develops chronic pain circuits. In this way you will finally understand the underlying cause of your pain and begin to take the steps to unlearn your pain.

chapter 2

Medicine's Blind Spot

Too much light often blinds gentlemen of this sort. They cannot see the forest for the trees. — Musarion

I have about come to the conclusion that there is absolutely nothing the matter with me anyway. —Harry S. Truman, on his decision to stop pain medications for neck pain

The key to treating chronic pain and other symptoms is to determine what is causing them. This is not only good medical practice, it is common sense. However, many doctors, whether traditional or holistic, are unaware that learned neural circuits can produce a large variety of real, physical symptoms. As a result, we have a growing epidemic of pain. Many millions of people suffer, and many billions of dollars are spent on treatments that are often ineffective, such as pain medications, injections, and surgery. Despite the growing amount of money spent on treatment of these painful conditions, the results are disappointing. In fact, a study published in the *Journal of the American Medical Association* found that back and neck pain is increasing in the United States and the cost of caring for such pain has increased to more than \$80 billion a year—yet the newest treatments are not any more effective than older treatments, and therefore disability due to back pain is increasing (Martin, et al., 2008). In 2011, the Institute of Medicine released a consensus report stating that approximately 110 million Americans suffer with chronic pain (Institute of Medicine, 2011). The five most common health problems causing disabilities in the US are back pain, neck pain and other musculo-skeletal pains, along with anxiety and depression (Murray, 2013).

Over the past five decades, medical science has progressed dramatically in several areas. We have made great strides in understanding and treating cancer, heart disease, stroke, hypertension, diabetes, infectious diseases, and many other illnesses. These achievements have been made

to find out what is occurring on a cellular and molecular level. This approach searches for a cure by examining the specific area where the disease is found. We can see the **pathological** changes in the body in people with cancer (a tumor), heart disease (damaged heart tissue), and infections (bacteria causing tissue inflammation). But these types of physically identifiable changes cannot be found in people with Mind Body Syndrome. People with MBS do not have **pathological** changes in their body tissue; they have **physiological** changes that are reversible. That is, they have changes in blood flow, muscle tension, nerve-firing patterns, and brain-wiring patterns that create pain in the **absence** of tissue pathology.

The vast majority of physicians, including me, were trained in the biotechnological approach to medical care. We were taught: “If the back hurts, there must be something wrong with the back.” We were not trained to look at the whole person to scrutinize the interaction between a person’s social situation and the body, nor to examine how a patient’s thoughts and emotions can affect the body.

The advances in understanding pathological processes have led us to believe that we could apply these same biotechnological approaches to chronic painful conditions that have eluded our understanding. This reductionist approach—looking at the problem solely on a tissue or molecular level—does not work when the disorder is Mind Body Syndrome. MBS is caused by a complex set of neurological connections between the brain and the body, rather than a disease localized in one area of the body.

Whiplash

Let’s start with a disorder that everyone “knows” is a physical condition: whiplash. Whiplash occurs when someone is in a car accident and the head is thrown backwards, causing strain to the tendons and ligaments of the neck. The neck pain or headaches that result can last for months, years, or even decades. But does this really make sense? If you fracture a bone, you will experience significant pain for a while. But when the fracture begins to heal, the pain will subside. A whiplash injury is a sprain or a strain of the neck, certainly a less serious injury than a fracture. We wouldn’t expect an ankle sprain to cause pain for years. So why wouldn’t a whiplash injury heal fairly rapidly? The answer lies in the neural connections. Once these connections are fired due to the injury, they can quickly become learned. They can continue to fire and then become wired so that pain can continue for a long time, even though the ligament strain will typically heal within a week or two.

H. Schrader, a Norwegian neurologist, wondered why there were so many people on disability for whiplash in his country, so he compared the rates of whiplash in Norway to those in Lithuania. In Norway, as in the United States, if you’re in a car accident, most doctors recommend rest, heat, and anti-inflammatory medications, hoping to mitigate the effects of the injury. In Lithuania, most doctors advise such patients to simply go back to work. Schrader studied 202 Lithuanians who had been in car accidents and found there were no more people with chronic headaches or neck pain than in a group that had not had car accidents. This was true even for those who had not been wearing seat belts, who had no head rests in their cars, and whose cars were severely damaged (Schrader, et. al., 1996). After this first study was criticized for gathering information after the car accidents occurred (making it a retrospective study), Dr. Schrader returned to Lithuania to conduct a prospective study, which has greater scientific validity, and he still found that whiplash did not occur there (Schrader, et. al., 2006). What we have learned is that the degree of the injury sustained is not correlated with the likelihood of developing chronic pain. Acute neck pain occurs in most injuries, but chronic pain is actually more likely to develop in those with milder rather than severe injuries (Malik and Lovell, 2004; Uomoto and Esselman, 1993).

A study by W.H. Castro and colleagues (2001) helps to give us a more complete understanding of whiplash. The researchers put fifty people in a simulation that created the sensation of having the kind of car accident that might cause whiplash. The participants had the experience of an accident, yet their necks did not move at all. Even so, 10 percent of the subjects reported neck pain four weeks after the simulated accident. Why? The researchers found that the people who developed persistent neck pain were the ones who had the most stress and emotional distress in their lives at the time of the experiment. As we shall see, their subconscious minds used the occasion of the experimental “accident” to initiate and perpetuate pain.

Without the mind at work, very few accidents and injuries would cause chronic, lasting pain. A study of demolition derby drivers revealed that almost none had chronic neck pain, even after more than 150 collisions (Simotas and Shen, 2005). Why? Because demolition derby drivers love what they do, and therefore they don’t think of the collisions as traumatic. Among most people in Norway and the United States and Canada and many other countries, however, there is an expectation that if you are in a car accident, you may develop whiplash and chronic pain. And, if the accident occurs at a time in your life when there are significant stressors, the chance that chronic pain will develop is greatly increased.

JULIE, A FIFTY-FIVE-YEAR-OLD WOMAN, *had a significant car accident and was shaken up, but the doctors found no broken bones when she was seen in the emergency room. About two days later she developed neck pain, although the rest of her bruises healed and caused her no pain. Her neck, however, got worse and worse. She had X-rays and an MRI that were normal, and therefore she was told it was probably whiplash and that it could last for a long time. She had physical therapy, took painkillers, and rested—all to no avail. Her pain worsened, and she had to wear a neck collar. She stopped going out and became depressed, and the pain got so bad that she cried several times a day. About a year later, she came across Dr. John Sarno's book, The Mindbody Prescription, read it, and began to understand that her pain was not caused by the injuries sustained in the accident, but by a set of neural circuits that were triggered by the accident. She realized that she could get better and started doing the exercises recommended in that book. In ten days she was well enough to get rid of her neck collar, and within three weeks she was pain free. She has not had any recurrence of neck pain.*

Back Pain

The situation is very similar for the vast majority of those with back pain and sciatica. There are millions of people with chronic back pain that causes untold suffering, great expense, and huge numbers of medical procedures. Most people think that back and neck pain are degenerative disorders that will inevitably increase with increasing age. However, data from the Center for Disease Control's annual National Health Interview Survey demonstrate that back and neck pain peaks between the ages of forty-five and sixty-four and then actually declines slightly starting at age sixty-five (Strine, 2007).

Doesn't back pain mean that there is a problem in the back? Can't we see the abnormalities of the back on X-rays, CT scans, and MRIs? Actually, no, and yes. As we shall see most people with chronic back pain do not have a clearly identifiable structural abnormality to explain it. But yes, almost all people will have some sort of abnormality seen on X-rays, CT or MRI scans. To understand this, we need to look deeper at the meaning and importance of these "abnormalities."

In three separate studies by M.C. Jensen, D.G. Borenstein, and N. Boos, there was very little correlation between back pain and MRI results (Jensen, et. al., 1994; Borenstein, et. al., 2001; Boos, et. al., 2000). When you take middle-aged people **without any back pain** and give them MRIs, 60-90 percent of them have bulging discs, degenerative discs, arthritic changes, spinal stenosis, and

other common changes. These findings are best interpreted as being due to normal aging, not to a disease process. If you took 100 people with back pain and 100 people without back pain and do MRIs on all of them, doctors could not look at the MRIs and predict which patients had pain and which did not. A study of healthy 21 year olds in Finland found that half of them had signs of degenerative discs and a quarter had bulging discs; all in people with no pain (Takatalo, et. al., 2009). When you take a large number of people who have no back pain at all, you find the following on

MRI Spine Imaging Findings In People With No Back Pain

IMAGING FINDING	Age, n=3300						
	20	30	40	50	60	70	80
DISK DEGENERATION	37%	52%	68%	80%	88%	93%	96%
DISK BULGE	30%	40%	50%	60%	69%	77%	84%
DISK PROTRUSION	29%	31%	33%	36%	38%	40%	43%
ANNULAR FISSURE	19%	20%	22%	23%	25%	27%	29%
FACET DEGENERATION	4%	9%	18%	32%	50%	69%	83%
SPONDYLOLISTHESIS	3%	5%	8%	14%	23%	35%	50%

THIS CHART SHOWS HOW COMMON THESE MRI FINDINGS ARE in people without any back pain. Even young people have relatively high rates of disk degeneration and bulging. Rates of these normal findings rise with age, yet back pain does not rise with age in the same way. The conclusion one should draw is that these findings are not actually abnormalities. They are normal signs of aging that are not the cause of pain.

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Brinjiki W, et. al. Am J Neuroradiol. 2015, 36:811-6*

MRIs: 50% of healthy 30-year-olds have degenerative disc disease and 40% have bulging discs; 80% of healthy 50-year-olds have degenerative disc disease and 60% have bulging discs; and the numbers go up from there (Brinjikji, 2015).

Over time, in some people the MRI results get worse, but the pain decreases; while in others the pain gets worse, though the MRI gets better. Many people with normal MRI findings have severe back pain. In fact, Eugene Carragee of Stanford University wrote in the *New England Journal of Medicine* (2005) that “neither baseline MRIs nor follow-up MRIs are useful predictors of low back pain” and added that “ill-considered attempts to make a diagnosis on the basis of imaging studies may reinforce the suspicion of serious disease, magnify the importance of nonspecific findings, and label patients with spurious diagnoses.”

If you have back pain and get an MRI, it is likely your doctor will tell you that the source of your back pain is one of the nonspecific findings Carragee warns about. Studies have shown that only 10 to 15 percent of people with back pain can be accurately diagnosed by available medical tests (Deyo, et. al., 1992). A more recent study followed over 1,100 people with acute back pain in Australia and found that only 1% of them turned out to have a significant back problem (Hensche, et. al., 2009). Unfortunately, most physicians (whether they are neurologists, surgeons, or physical medicine specialists) and chiropractors don't heed these studies. When doctors tell a person there is a physical problem in their back based on an MRI result, the patient immediately stops being someone with back pain and starts being someone with a bad back. And if you believe you have a bad back, your pain is more likely to last longer and become more severe.

It is critically important to identify the small proportion of back pain sufferers with serious problems by the use of imaging studies. These people typically have a fracture, a tumor, or an infection and need traditional medical treatment or surgery. It is also important to have a physician examine you to make sure there is no evidence of nerve compression or damage, which is demonstrated by a change in reflexes, muscle strength, or loss of sensation. Pain that goes into an arm or leg, tingling, and numb sensations can occur due to MBS, but as long as the examination is normal, this is not clear evidence of nerve damage. At times, it is difficult to know definitively if the pain is due to MBS, or nerve damage, or a bit of both. In these situations, it is particularly helpful to have a consultation with a physician, who can conduct a thorough examination, review the records and imaging studies, and offer a reasoned opinion. Unfortunately, there are relatively few doctors who are aware of MBS. However, if your physical examination is normal and the MRI shows nothing more than the usual degenerative changes as mentioned above, then it's likely that you have MBS.

Back surgery may be necessary for some people with clear evidence of nerve damage. But without that evidence, surgery is no better than nonoperative methods for people with sciatic-type and so-called degenerative back pain, according to recent studies in the *Journal of the American Medical Association* and in the *New England Journal of Medicine* (Weinstein, et. al., 2006; Weinstein, et. al., 2007). A recent review of back pain treatment found that neither surgery, injections, or narcotic pain medications have been shown to be more effective than placebo treatments or conservative treatments (Deyo, et. al., 2009, Deyo, 2015). In particular, injections for back and neck pain are being used more often and recent studies have not found them to be more effective than placebo injections in most instances (Friedly, et. al., 2014; Staal, et. al., 2009; Chou, et. al., 2009). Even more alarming is the finding that back pain outcomes were actually worse in communities with higher rates of surgery (Keller, et. al., 1999). A study in Ohio found that 36 percent of people with job-related injuries who had back surgery had high rates of complications, and 27 percent had repeat operations. The return-to-work rate was 66 percent in those who did not have surgery compared to 26 percent for those who had back surgery (Nguyen, et. al., 2011). If you or someone you know is considering surgery for back pain, I strongly recommend reading *Back in Control* by my colleague and spine surgeon, Dr. David Hanscom and *Watch Your Back* by Dr. Richard Deyo. Finally, there is emerging evidence that treatment of chronic pain with narcotic analgesics can actually worsen pain, because narcotics can increase nerve sensitization (Mitra, 2008; Silverman, 2009).

I routinely see people with severe and chronic back pain (including many who were taking morphine or Vicodin or who were on the verge of back surgery) who have had dramatic results in a very short time by using this treatment program for Mind Body Syndrome.

HELEN, A SIXTY-FIVE-YEAR-OLD WOMAN, *had suffered from nine years of back pain.*

The pain started in her lower back one day while she was working at her job on an automobile assembly line. It was so severe that she had to be carried out of the factory. She was seen by several doctors, and eventually an MRI revealed the following:

Severe disc space narrowing at L4-L5 and flattened discs at L2-L3 and L3-L4. Disc bulging with flattening of the spinal cord and narrowing of the outlet for the spinal nerves at L2-L3, L3-L4, L4-L5, and L5-S1. The right L4 and L5 nerve roots are compressed by a disc. The facet joints are swollen and there is spinal stenosis.

Helen underwent seven courses of physical therapy, along with massage therapy, acupuncture, electrode nerve stimulation, and specialty care from a pain management

clinic. Despite these treatments, her pain continued. It radiated to her right leg and heel, and she began to develop numbness in her left thigh. After nine years on disability leave she finally took an early retirement, and a neurosurgeon scheduled her for lumbar fusion surgery due to the chronic and severe pain. Her physical exam showed normal reflexes, normal muscle strength, and normal sensation despite her symptoms of pain and numbness.

Helen was the oldest of ten siblings. Her father beat her when she was a child, and her mother required her to do a great deal of housework and child care. She recalls going into a closet and screaming, “I hate my parents! I hate my parents!” She had a difficult adult life, which included raising three children by herself, three divorces, and struggles with alcoholism (though Alcoholics Anonymous had helped her remain sober for twenty-seven years). She had many financial difficulties and became very unhappy with her job.

By participating in this program, Helen noted marked pain relief over the first two weeks. The numbness in her thigh disappeared. By the end of the four-week program, she was pain free and canceled her back surgery. Her joy was incalculable, and she felt in control of her body and her life for the first time in nine years.

Four months later, she had a recurrence of back pain one day, but she quickly figured out what caused it. It began on the day she learned that her daughter was scheduled to depart for military duty in Iraq. Recognizing that her emotional stress was responsible for this pain, she used the methods taught in the program to rapidly rid herself of the pain. “In the past, stress would cause pain in my body that would cripple me,” Helen said. “But now I look at it, and it goes away.”

KATHERINE, A FORTY-TWO-YEAR-OLD WOMAN, came to me with four years of left buttock and leg pain. Her pain began in the area of her left hamstring while she was running in a ten-kilometer “fun run,” an easy task for an active person who had previously run marathons and had regularly hiked, skied, and mountain biked. Despite rest and anti-inflammatory agents, the pain worsened. She then received physical therapy, chiropractic treatments, acupuncture, and massage; she also tried yoga, pilates, and Rolting, with no improvement.

MRI scans of her back and X-rays of her hip were normal, and Katherine was diagnosed by different physicians as having a pulled hamstring, iliotibial band syndrome,

sacroiliac joint instability, and a leg length discrepancy. Despite all of the above therapies, the pain persisted and spread to her hip, outer thigh, and gluteal area. She stopped running and could not do any other physical activities because of the pain. After being seen by a family physician, orthopedic physician, neurologist, and physical medicine specialist with no improvement, Katherine was eventually referred to a nationally renowned medical center. There, she was given a diagnosis of piriformis syndrome and received a steroid injection followed by more physical therapy. Unfortunately, her pain did not diminish, and Katherine continued to spend significant portions of each day in bed or lying on the couch. Over the last few years, she had developed pain in her right scapular area and her right hip as well.

Katherine had experienced tension and migraine headaches as an adolescent. She also suffered from insomnia, fatigue, and depression when she was in her early thirties after her father and mother divorced. Katherine noted multiple stressors over the past several years: she had moved to a new city, her husband had started a new job, her mother had suffered a heart attack, her child had trouble sleeping, and she had renovated her husband’s office and her home. She admitted to having high expectations of herself, frequently feeling guilty and being overly conscientious. She told me that she had all but given up on all of her dreams and abilities to live a normal life because of her great pain.

By participating in this program, Katherine was able to connect the occurrence of pain with her life experiences. Her pain diminished within the first two weeks of the program, and she began to resume her normal activities, including running twice a week without pain. After four weeks, she wrote, “I am so happy to say that I now have the ability to recognize that my pain is caused by an accumulation of anger and guilt in my mind and that it uses my body as its outlet and that I no longer allow it to do so. This has taken work on my part; however, I am thankful that I am able to now let go and be pain free.”

Fibromyalgia

One of the more enigmatic disorders is fibromyalgia, which means “painful muscles and tissues.” People diagnosed with this disorder have chronic widespread pain throughout their bodies, but no one can tell them why. Despite great efforts to find a structural cause, there is no pathological process (no tissue breakdown or destruction) in the bones, joints, tendons, or muscles, yet the pain can be severe and debilitating. Brain imaging studies have shown that the pain is real and is felt as

much as pain from a bone fracture (Gracely, et. al., 2002). It is incredibly frustrating for people with widespread pain to have no idea what causes it, to be considered crazy by some, to be considered incurable by others, and to get little or no relief from available pain medications, muscle relaxants, anti-depressants, and mood stabilizers (Wolfe, 2009; Baumgartner, et. al., 2002; Goldenberg, 2004). Because of the difficulties in understanding and treating fibromyalgia, people who suffer with this very real and often severely painful condition have often been treated poorly by the medical profession. Having been told many times that their pain is “all in their head,” patients are understandably sensitive to any psychological interventions. Few patients and even fewer doctors realize that real pain can be caused by stress and unresolved emotions. If you are skeptical of this concept, you’re not alone. However, keep an open mind as you read the next few chapters and I believe you will begin to be convinced. If you are, you have the opportunity to free yourself from this horrible disorder.

People with fibromyalgia also commonly have lower back pain, migraine or tension headaches, temporomandibular joint (TMJ) pain, irritable bowel and bladder syndromes, insomnia, brain fog or many of the other Mind Body Syndrome symptoms (Geisser, et. al., 2008). Biomedical experts have been able to determine that there is sensitization of neural circuits in the brains of people with fibromyalgia and changes in some of the neurotransmitters in their brains (Yunus, 2007). However, they have not been able to develop any significant breakthrough medical therapies. In fact, very few patients with this condition have been cured or gone into remission through standard medical treatments (Walitt, et. al., 2011).

There is ample evidence that people with fibromyalgia have much higher rates of life stressors and victimization (physical, sexual, or emotional abuse) compared to people with other physical disorders and compared to the general population (Goldberg, et. al., 1999; van Houdenhove, et. al., 2001). There is also a large overlap between those with fibromyalgia and those experiencing anxiety, depression, and post-traumatic stress disorder (Cohen, et. al., 2002; Celiker, et. al., 1997). As we shall see in the next chapter, the effects of these stressors are the cause of the painful fibromyalgia symptoms. However, most physicians and researchers can only offer medications to try to cover up the pain. These medications do not lead to cures because they don’t get to the root of the problem.

I have seen many people released from the pain of this disorder using the program outlined in this book. If you listen carefully to the full life history of people with fibromyalgia, it becomes crystal clear that it’s a form of MBS. In fact, I have conducted research to determine how effective this program is for fibromyalgia, and the results have been gratifying (Hsu, et. al., 2010). Six weeks

after their MBS treatment, approximately 25 percent of patients have gone into remission, meaning their pain has been eliminated or reduced to very low levels. Another 25 percent have experienced a moderate reduction in their pain. These results may not seem remarkable, but consider this: These reductions in pain are long lasting (measured at six months) and exceed the results found in studies of medications. The women with fibromyalgia who were in the control group in this research study were able to use any medications or other treatments. However, none of them showed any evidence of pain reduction. In a more recent study, conducted with my colleague, Mark Lumley, PhD, we demonstrated even better results. We studied a group of 75 individuals who had a history of chronic pain for an average of 8.8 years and whose primary disorder was fibromyalgia or back pain, although most patients had many symptoms of MBS. Their average baseline pain scores were 5.1 on a 10-point scale and 57% had a history of significant childhood trauma. Six months after going through the Mind Body program, 53% showed a reduction in average pain scores by at least 50% and 67% had at least a 30% reduction in pain scores. These are remarkable results for people who have suffered with pain for so many years (Burger A, et. al., 2016). This program requires you to fully understand this model, believe that it applies to you, and be fully committed to the process. People with fibromyalgia and other chronic painful conditions who do these things almost always obtain significant results in this program.

In a larger study funded by the National Institutes of Health, Mark Lumley and I compared the kinds of treatments used in this book to the standard psychological treatment for fibromyalgia pain, cognitive-behavioral therapy (CBT) in a randomized, controlled trial. We found that this treatment, emotional awareness and expression therapy (EAET, which is described later in this book) was more effective than CBT in reducing pain. Approximately 22% of those treated with EAET had more than 50% pain reduction at a six-month follow up compared to about 9% of those treated with CBT. This was one of the first studies to show that one psychological treatment for pain was actually better than another (Lumley, 2017). In a more recent study, Brandon Yarns showed that veterans with chronic musculo-skeletal pain had more benefits from EAET than from CBT, with 31% of those having greater than 50% pain reduction compared to none in the CBT group (Yarns, et. al., 2020).

ANJANI, A FORTY-SEVEN-YEAR-OLD WOMAN *who migrated to the United States from India, reached a point in her life when she was beginning to think of doing some more things for herself, such as taking classes at a local college. However, her husband took*

an extra job, and she had three adolescent children who required a lot of her time. On top of that, her mother-in-law moved into her house and began to lecture her on how to be a better cook, homemaker, and mother. In addition, her brother moved in and expected her to wait on him. Being a dutiful person who put her obligations to others ahead of her own desires, she complied with these additional stressful tasks and cancelled her class, but she had no outlet for her feelings of resentment. Her body reacted to these stresses and suppressed emotions with a widespread painful process, which was labeled as fibromyalgia. After going through this program, her pain was dramatically reduced. One of the keys to her improvement was that she decided to speak up for herself and take more control over her situation at home.

JANET, A FORTY-ONE-YEAR-OLD WOMAN, *grew up with a mother who was emotionally distant. The mother was very busy with her own life and was usually gone, often playing bridge and tennis. Janet had no illnesses or symptoms of MBS until she was in her thirties. She was happily married, with two small children, for whom she was determined to be the best mother possible. She was having a new home built and trying to make it perfect. At this time, she began to develop widespread pain in her muscles and tendons, which was diagnosed as fibromyalgia. When I asked her what her mother was doing at the time she and her children needed her help, she replied, "Playing bridge and tennis." She then began to sob over the loss that she experienced as a child and that her children were now experiencing. Her mother was being as distant with her grandchildren as she had been with her own daughter. At this stressful point in her life, that separation was enough to trigger severe pain in her body. Once she realized that she was not physically ill and that her pain came from unexpressed emotions, her pain totally disappeared.*

Headaches and Other Disorders

Tension headaches and migraine headaches afflict millions of people in the United States. More and more people are suffering, and specialized headache clinics have been established for people with severe symptoms. Yet, despite the development of many new medications, we see rising costs of treatment as well as increased loss of productivity due to absences from work and school.

The vast majority of people with chronic headaches have normal CT scans and MRIs. Tests do not detect anything wrong in their brains. As with fibromyalgia, there are many theories about

what causes these headaches, from food and chemical sensitivities to genetics. Such things can trigger headaches, but they are not the main underlying cause of these severe and chronic headaches. Let me briefly explain, but there will be much more on this topic later in the book. We have learned that many people have triggers to pain that can be unlearned. For example, if changes in the weather or certain foods or certain movements or activities trigger migraine or other pains, it is likely that these factors are simply causing the brain to activate the neural circuits for pain, rather than actually causing a physical reaction due to an injury. This is known as a conditioned response, which is reversible. Migraine is a good example of a disorder that can have a genetic predisposition. In other words, people with family members who have it may have genes that make it more likely to occur. This is also the case with genes for depression. However, it is important to understand that these genes function in an epigenetic manner, meaning that the genes can actually be turned on and off by life stresses. Therefore people with migraine can get better despite having a genetic predisposition for it by using this program.

Headache specialists do not generally listen very carefully to a patient's life story. Even if they did, they may not be aware that mental events can produce such severe symptoms. When you look very carefully at the onset of headaches and at the precise times they worsen, you will find that conscious and/or subconscious emotions are at the root of the problem.

VICKIE, A FIFTY-FIVE-YEAR-OLD WOMAN, *suffered from constant daily headaches for seventeen years. She had been evaluated by twenty doctors and had been placed on more than twenty different medications in an attempt to control the persistent pain. She had even had a surgical procedure to attempt to relieve pressure on a facial nerve that was thought to be trapped by muscles.*

She had never had headaches until the day when she put on a new pair of prescription glasses and instantly developed pain on the left side of her head that radiated into her face. The pain worsened over the years, and no treatment ever helped.

When I listened carefully to her life story, she told me that her mother was aloof and her father was "bipolar" and unpredictable. Some days, he would come home from work and be fine, but on many occasions he would be in a bad mood and would often grab her by her collar and scream at her. Despite this difficult upbringing, she had no symptoms at all as a child.

At the time when Vickie got the glasses, her home life was fine. However, she had

recently gotten a new boss, a woman whom she described as “mean and nasty,” who would frequently scream at her.

It became obvious that the new glasses did not cause her headaches, but when she put them on, her subconscious mind used the opportunity to create pain in the same way that a real or simulated car accident can become an opportunity for pain of whiplash. Vickie quit her job a few months later, but by that time the vicious cycle of nerve connections had been formed, and her headaches continued on a daily basis. She started this program, and her headaches gradually began to decrease. After the program, her headaches continued to improve, and after six months she became free of them altogether.

There are several other conditions that are typically manifestations of MBS, such as chronic abdominal pain and pelvic pain, TMJ pain, irritable bowel syndrome, irritable bladder syndrome (known as interstitial cystitis), chronic fatigue, tinnitus, insomnia, anxiety and depression. See the

Conditions that are Commonly Caused By Mind Body Syndrome

CHRONIC PAIN SYNDROMES

Tension headaches
Migraine headaches
Back pain
Neck pain
Whiplash
Fibromyalgia
Temporomandibular joint (TMJ) syndrome
Chronic abdominal and pelvic pain syndromes
Chronic tendonitis
Vulvodynia
Piriformis syndrome
Sciatic pain syndrome
Repetitive stress injury
Foot pain syndromes
Myofascial pain syndrome

AUTONOMIC NERVOUS SYSTEM RELATED DISORDERS

Irritable bowel syndrome
Interstitial cystitis (Irritable bladder syndrome)
Postural orthostatic tachycardia syndrome
Inappropriate sinus tachycardia
Reflex sympathetic dystrophy (Chronic regional pain syndrome, CRPS)
Functional dyspepsia

OTHER SYNDROMES

Insomnia
Chronic fatigue syndrome
Paresthesias (numbness, tingling, burning)
Tinnitus
Dizziness
Spasmodic dysphonia
Chronic hives
Anxiety
Depression
Obsessive-compulsive disorder
Post-traumatic stress disorder
Multiple chemical sensitivities

NOTE: Many of the symptoms in this table can be caused by physical disorders that require medical treatment. Consult your doctor or a specialist in Mind Body Medicine (see the Appendix) to determine if you can participate in this program. See Chapter 5 for help in determining if you have Mind Body Syndrome.

table on page 20 for a list of common syndromes caused by MBS. This list of symptoms includes those that are commonly encountered by doctors like myself who see patients with Mind Body Syndrome. However, almost any symptom can be caused by MBS, just as any symptom can be caused by a medical or structural problem. Over the years, I have seen people with a variety of unusual symptoms that are due to MBS, such as burning of the mouth, ears, hands, or feet, tingling or electric sensations of almost any body part. Sensations caused by the brain are real, they are caused by neural circuits that are real; they can be powerful and we experience them in a very real way. However, if we can understand that MBS sensations are not dangerous, that our brain is producing them, we can then be much more confident in taking the necessary steps to reduce or eliminate them. We can change these neural circuits and that is the basis of this book. If a careful medical evaluation does not show any clear pathologic process, then the symptoms in these conditions are likely caused by a vicious cycle of nerve connections that have been learned by the mind and body.

Standard Treatment Equals Faulty Diagnosis

What happens if you develop any of these MBS symptoms and seek care from your physician?

The doctor will rarely take a careful enough history to determine if the symptoms may be related to stressful events and emotions. However, your doctor will usually do thorough medical testing to look for serious disorders such as cancer, immune disorders, fractures, and heart and vascular diseases. These tests are very important to make sure you don't have a tissue breakdown disease. If the tests find no clear evidence of disease, you may become more anxious because there is no clear explanation for the symptoms, and the doctor may be puzzled and tell you that the pain is all in your head. This is one of the worst things a doctor can say to someone. Mind Body Syndrome is a real condition, and it can be effectively treated. It is not imaginary or brought on because the patient wants to be sick. Many people that I see are frustrated with their doctors for not explaining what is going on and why they are in pain. The reason most doctors don't adequately explain chronic pain is that they don't understand this disorder.

If the doctor finds something on an MRI such as a degenerating disc or bulging disc or spinal stenosis, the patient will often be led to believe there is a serious medical condition. Once someone is told that they have fibromyalgia, they may be initially relieved to discover that there is a name for their severe symptoms. However, once they are told that they will have to manage the pain since

there are no effective treatments to cure it, they are likely to become upset and depressed.

Traditional medical treatments are geared towards correcting the underlying pathology in the body. In MBS, there are reversible physiological changes to the brain and nerve pathways, but there is no underlying tissue breakdown. Standard treatments don't address the true cause of these symptoms but try to cover them up. Pain medications, migraine medications, stomach and bladder medications, physical therapy, acupuncture, vitamins, herbs, and all of the other therapies recommended for these disorders will often provide at most a partial or a temporary relief. When these therapies and medications do work for people with MBS, it is usually due to the placebo effect, that is, the expectation by the patient that the treatment will work (Bausell, 2007; Brody and Brody, 2001). With this belief, the mind allows the treatment to work—but often the relief is only temporary, since the person has not understood what caused the problem in the first place.

Despite the absence of confirmed pathology, the doctor will often make a diagnosis. Medicine has given names to these clusters of symptoms: fibromyalgia, migraine headaches, sciatica, interstitial cystitis, TMJ disorder. This labeling is often harmful. The patient now thinks he or she has a serious condition, and websites for these conditions support the belief that the condition could be severe and long lasting. If referred to a pain clinic, patients are often told that they have a disorder called “chronic pain” and that the goal of their treatment will be to help them be more functional, rather than to reduce their pain. Even the top pain clinics and pain rehabilitation programs in the country take this position: that chronic pain is incurable and that the best we can do is to help people cope with it better. When no clear physical cause is found, the diagnosis given will often be central sensitization, meaning that the brain has sensitized pain circuits that are persistently firing, and that it is irreversible. Psychological treatments such as CBT, acceptance and commitment therapy, and mindfulness based therapies, are all excellent approaches, but they have limited value when they are used for coping, rather than curing. From my point of view, pain is a symptom of an underlying process. It is not a diagnosis any more than a fever is. With pain and fever and other symptoms, there are underlying causes.

The medical profession has unwittingly created a form of mental imprisonment called medicalization, when diagnosis and treatment causes an increase in pain and suffering. The false belief that one has a serious and intractable condition causes activation of more stress and emotional reactions, such as depression, hopelessness, helplessness, fear, and anxiety, that can exacerbate the problem. This is known as the nocebo effect, where the subconscious brain begins to “expect”

that things will get worse, and then the brain activates increases in neural circuit based symptoms. When MBS is treated as a purely physical condition, the symptoms often get worse rather than getting better. Injections, pain medications, and surgery can cause side effects and even be dangerous at times. In addition, the cost associated with such faulty diagnoses are staggering. It is estimated that up to one third of the medical care in the U.S. is unnecessary (Brownlee, 2007).

The first critical step in dealing with chronic symptoms is to get the correct diagnosis. If there is a tissue breakdown disorder, then I would recommend traditional medical treatments. If you have been suffering for some time, if your doctors haven't been able to adequately explain why you have so much pain, if your only options are surgery or pain medications, then you are likely to have MBS. If the true diagnosis is Mind Body Syndrome, then traditional medical therapies are not likely to cure the condition. Your doctors have not been able to help you because they have been looking in the wrong place.