

REWIRE YOUR BRAIN TO **RELIEVE CHRONIC PAIN**



Do you suffer from persistent pain? If so, you're not alone. The CDC reports that 50 million Americans have suffered from chronic pain (pain that occurs most days) in the past six months.

Pain interferes with your ability to think and concentrate. It affects how you move your body, and what activities you are comfortable doing. Pain can negatively affect your social life and rob you of enjoying your favorite hobbies and activities.

Many people who live with chronic pain have sought treatment from talented and caring healthcare profes-

sionals, but even their best efforts often leave the patient feeling worse. Many chronic pain patients feel that people, even healthcare professionals, don't believe their experience. Furthermore, we have learned that the long-term use of "painkilling medication" has not only been unsuccessful, but it can be harmful.

In the last decade, we have learned a great deal about what pain is and how to treat it. Researchers have found that **persistent pain actually changes the brain.**

(continued inside)



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WE HEARD YOU MISSED US!

Many of our patients have expressed that they missed our newsletter, so we're bringing it back! If you no longer wish to receive our physical newsletter, please give us a call and let us know. Thank you!

TREATING CHRONIC PAIN:

HOW THE BRAIN CAN BE REWIRED

Although pain can be an annoyance, it can also be a good thing. Pain signals are necessary for keeping us healthy and safe — it's our nervous system's way of telling us that we need to protect our body or pay attention to a part of our body that may be injured.

However, researchers have found that when pain persists over time, the brain changes. As a result of these changes, you may continue to feel pain even after an injury or illness has healed.

Throughout the brain, there are several *neurotags*, which are groups of interconnected brain cells. When a specific group of brain cells is activated simultaneously, it produces an output. For example, the neurotag for neck pain consists of a group of specific brain cells; when all of these brain cells are activated at the same time, it produces neck pain.

When pain persists over time, these pain neurotags can become sensitive and overactive, which can cause that group of brain cells to be activated much more easily. This results in even more pain.

The longer that pain persists, the more practice the brain gets at producing a pain response to the information coming into our nervous system. Persistent pain also disinhibits the neurotag for that body part, which can affect movement, precision, function, perception, and almost anything else related to the affected body part.

The good news is: even if your pain neurotags have become sensitive, overactive, and disinhibited, the brain can be rewired!

Graded Motor Imagery (GMI) is a technique for treating chronic pain by rewiring the brain. The goal of GMI is to retrain your brain to have an accurate pain response again.

GMI takes you through a series of mental and physical exercises, including implicit motor imagery, explicit motor imagery, and mirror box exercises.

GMI teaches you how to rewire your brain so that pain becomes a wonderful, healthy response that protects you instead of being an overactive, overprotective response that limits your life.

GIVE THIS NEWSLETTER TO A FRIEND

Many of our patients have trouble explaining to others what we do here at Synergy. Please give this newsletter to a friend or family member so they can learn more about what we do and how we may be able to help them!

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Frequency Specific Microcurrent (FSM)

What is Frequency Specific Microcurrent (FSM)?

A microcurrent is a tiny electric current that is only a few millionths of an ampere. An ampere is the measurement of the movement of electrons past a certain point. Your body produces this type of current within each cell on its own. Frequency Specific Microcurrent (FSM) is the practice of introducing a mild electrical current (one-millionth of an amp) into an area of damaged soft tissue. The introduced current enhances the healing process in that tissue. FSM takes advantage of the body's ability to respond to specific frequencies in order to heal new or chronic injuries.

Patients cannot generally feel the current, nor do they have any significant side effects from it. Some frequency settings can make the patient feel much more relaxed; other frequencies help memory and thought processes while reducing pain.

Are There Any Risks Or Dangers to the Patient?

There are no risks to the patient that we know of, as long as the practitioner follows the proper contraindications and precautions associated with both Frequency Specific

Microcurrent and the use of microcurrent. Patients who are dehydrated will not benefit from FSM. Patients are advised to drink at least one quart of water one hour before treatment. Patients who are chronically dehydrated may need more water over several days prior to their treatments.

No technique is 100% effective, and Frequency Specific Microcurrent is no exception. The effectiveness of FSM depends on accurate diagnoses.

Conditions for Which Others Have Reported Benefits with FSM

Asthma • Back Pain • Bell's Palsy • Bronchitis • Carpal Tunnel Syndrome • Complex Regional Pain Syndrome (CRPS) • Concussion • Anxiety • Endometriosis • Fibrosis • Frozen Shoulder • Gout • Interstitial Cystitis • Irritable Bowel Syndrome • Kidney Stone Pain • Headaches • Osteoarthritis • Post-Surgical Pain • Post Traumatic Stress Disorder (PTSD) • Restless Leg Syndrome • Scar Tissue • Sciatica • Sinusitis • Sports Injuries • Sprains and Strains • Temporomandibular Joint Pain (TMJ) • Tendon and Ligament Pain • Tennis Elbow • Whiplash • Wound Healing

TMR Sit-To-Stand Exercise

Total Motion Release (TMR) is a physical therapy technique that helps the body to naturally re-align and heal. TMR focuses on exercising the "good" side of the body, rather than the side where your pain is occurring. For example, if you have pain in your right shoulder, TMR would exercise the left shoulder.

Read the TMR process below, and then give it a try with this single leg sit-to-stand exercise.

THE PROCESS OF TOTAL MOTION RELEASE (TMR)

1. First, do the exercise once on each side of your body. Be mindful of how each side feels. Do you feel more pain or discomfort when performing the exercise on one particular side? The side that feels the best will be considered your "good" side.
2. Next, continue doing the exercise (2 sets of 8-12 reps) only on your "good" side.
3. After each set of reps, retest the right and left sides. If they're still not equal (i.e. there's still more pain on one side), do another set of reps on your "good" side. Retest both sides after every 2-3 reps.
4. Continue until both sides feel the same.

SINGLE LEG SIT-TO-STAND EXERCISE

1. Sit down on a chair, sofa, or whatever is available to you.
2. While keeping one foot flat on the floor, extend your other foot out in front of you and slightly lift it off of the ground.
3. Pressing into the foot that is on the floor, carefully rise up to a standing position. If needed, you may hold on to nearby sturdy objects for balance.
4. Keep your other foot lifted off the ground while you lower yourself back into a seated position.



Patient Success Spotlight

“I eventually began to see improvements and get my life back.”

“In 2014 I was diagnosed with Complex Regional Pain Syndrome (CRPS) a few months after I fell while running. When I first came to Synergy, I was getting around either on crutches or a knee scooter and I couldn’t drive since it was mainly my right foot that was affected. I had left my job as a laboratory technician, as I was unable to work due to physical limitations, pain, and other symptoms of CRPS like fatigue and anxiety. I couldn’t participate in family activities or be the parent that I wanted to be. I was filled with fear that I would never be able to work, be independent and drive myself, be a part of my family, hike, camp, or travel ever again.

It took some time but I eventually began to see improvements and get my life back. Graded Motor Imagery definitely helped me. I spent a lot of time using the Recognise app, motor imagery, and mirror therapy. Arch then taught how to slowly build in exercise and increase it as I progressed and gained confidence. I still have a little pain, but nothing that is not manageable and most importantly I fully have my life back now. I am back at work, I am able to participate in my family life, travel, and do all the outdoor activities I love.

Since my time at Synergy and my recovery I have gone on many trips including Japan in 2016 and the UK in 2018. This photo of me post-recovery is at the Tower of London, a place I have always wanted to visit. I am so grateful for the help I received at Synergy and how they helped me get my life back. I strongly recommend Synergy and all the therapists, especially Arch and his knowledge of complex pain and GMI for people in situations like mine.”



Staff Spotlight

Arch Harrison, PTA, LMT, JSCC

I've been a physical therapy assistant since 1992 and a licensed massage practitioner since 1986. I have a wide range of skills, and I specialize in a technique called Strain Counterstrain, which I have studied and practiced intently since 2000. In addition to Strain



Counterstrain, I also work with video analysis of gait and functional biomechanics, surface electromyography and biofeedback for muscle re-education, Graded Motor Imagery (GMI) for CRPS, soft tissue mobilization techniques, functional exercise programs, and muscle energy techniques.

My passion for providing service and improving health and human performance is not just a part of my job, but who I am. The promise I make to my clients is: although it is impossible to guarantee the outcome from treatment with any client, I can guarantee my best effort, dedication, and compassion for every client I see. I will treat each client as an individual, I will listen carefully to their needs, fears, and goals. I will strive to give my clients the tools they need to care for themselves independently, as quickly as possible. I am honored by the trust given to me by my clients, and I dedicate myself to being worthy of their trust.

FRIENDS OF SYNERGY

\$20 SYNERGY BUCKS

“You help us to help others”

Thank you to all those who have referred a friend or family member to Synergy. In return, you will receive \$20 Synergy Bucks—equivalent to cash to spend on services and products at Synergy! Thank you to everyone who has referred friends or family to us.

Recent Synergy Bucks Recipients

| | |
|--------------|------------|
| Lori U. | Carla C. |
| Jan J. | Joy G. |
| Elizabeth B. | Maria A. |
| Mark M. | Dan S. |
| Allison F. | Tina S. |
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CALL TODAY! (509) 413-1630

THE BENEFITS OF **EARLY PEDIATRIC THERAPY**

Infants and toddlers can benefit from early physical therapy to treat a variety of conditions including infant torticollis, developmental delay, and idiopathic toe walking.

Infant Torticollis

Infants may present with torticollis at age 2 weeks to 3 months, and it is during this time that early referral to physical therapy is most effective. Yet sometimes the early signs of infant torticollis are subtle and may be missed. The child may resist prone postures, have difficulty rotating his or her neck, and demonstrate positional preference with gaze and interaction. As the condition progresses, the distinctive torticollis posture develops with restricted cervical range of motion, cervical weakness, and altered movement postures. This alteration in movement is associated with reduced global strength and developmental delays in rolling, reaching, independent sitting, and crawling. Additional concerns of prolonged torticollis include the development of plagiocephaly and changes in facial structure due to bony changes from prolonged cervical postures, which requires further corrective treatment.

However, if it is recognized early, infant torticollis can be successfully treated. Early physical therapy treatment for torticollis includes patient family education on child posturing and holding techniques, gentle cervical range of motion and stretches, and gross motor strengthening. Early treatment with physical therapy is important to assist with correcting the infant's posture, preventing further complications, and addressing gross motor developmental delay.

Developmental Delay

Early physical therapy is important to reverse or reduce the progression of developmental delay. In addition to infants with torticollis, children having had birth trauma, comorbidities, or premature delivery are also at risk for developmental delay. Early physical therapy treatment for developmental delay focuses on helping the child meet motor milestones. This includes patient family education on functional strengthening, positioning, and supported mobility that can be achieved through play. As they continue to grow and develop, children with developmental delay may need assistance with more challenging mobility needs, including walking and negotiating stairs; early physical therapy can help address these concerns as well.

Idiopathic Toe Walking

Early physical therapy can also be useful to treat idiopathic toe walking. Although many children may occasionally walk on their toes as they are learning to walk, if the child does so frequently and for prolonged duration, the child may benefit from physical therapy treatment. Physical therapy treatment for toe walking includes heel cord stretches and range of motion, strengthening, and balance tasks. If left untreated, toe walking can lead to the development of heel cord contractures, persistent altered gait and posture, pain, and reduced functional tolerance of walking, running, and jumping. These impairments can persist well into childhood and as an adult. Chronic toe walking treatment includes casting and surgery; however, such treatment can be avoided with early physical therapy.

Overall, the benefits of early physical therapy treatment are significant. Early physical therapy is an opportunity to help children and their families correct progressive impairments, prevent further complications, and improve function. Physical therapy is an important component of treatment for children with impairments and disabilities, and early treatment is essential to provide the most effective care and achieve the most successful outcomes.



WE'RE NOW OFFERING

PEDIATRIC PHYSICAL THERAPY

Sally Zenner, DPT

Pediatric Physical Therapist

Sally completed her undergraduate education at Boise State University with a B.S. in Health Science Studies and received her Doctor of Physical Therapy education from Idaho State University. She is experienced in working with children in outpatient clinics, schools, and hippotherapy, and she also conducted pediatric physical therapy research in her training programs. Sally enjoys helping children with developmental delays, infant torticollis, and idiopathic toe walking. She also has a strong background in orthopedics to assist children recovering from injuries and post-surgical rehabilitation. Sally strives to provide children and their families with customized care that improves strength, balance, and gross motor function through play. In her spare time, she enjoys the arts, attending community events, and spending time with friends and family.

PATIENT TESTIMONIAL

We came to Synergy Healthcare for O.T. help with handwriting, but we are getting so much more.

Two months ago, when we started, our son's handwriting was illegible. It drove us crazy that our 6 year old was not taking pride in his work. We harped on him for not slowing down to connect his capital "F's," to give one example. If fine motor was our only problem, certainly more military-type practice would fix the issue. Well, all the harping and reminding wasn't helping, and you taught us why. His ocular motor skills were weak; his eyes get tired tracking. You taught us there's a link between fine motor and eye tracking. The fun, simple games you gave us to do at home have helped. Every week you have something new for us to try. We aren't through yet, but we see a huge difference in his letter formation. And the grandparents can now read his notes.

What surprised me most is you're addressing the "ants in his pants." Coming up on second grade, he's going to have a lot more handwriting. It's easier to succeed at handwriting if you're sitting still. Unlike well meaning friends, you've got constructive tools for us to mitigate the spinning-wiggles when we need to. We love playing for 15 minutes before doing our handwriting homework. If we do the whole 15 minutes, he doesn't change his body position while doing his workbook. It's amazing. I finally feel like I know how to be his mom. Before dinner, we do some of the other things you suggested: scrub down the table, vacuum the living room, pushup challenge, or pretend to be different animals on the floor. We don't always do one, but when we do it always works. You'll hear a lot less nagging around our house now; unless there are dirty dishes.

I wish every kid could do handwriting through your program. It's brought pride to our son's work, and predictable peace to our homework time.

I can't thank you enough,

N. Adams

