

Physical Therapy 101

Tim Braun, P.T.

Why should I attend Physical Therapy? Is it necessary? What is Physical Therapy? I have heard many fears and reasons not to attend physical therapy over the years. "I've seen grown men cry" and "if you aren't crying you're not trying" come to mind. The most popular is P.T. stands for "physical torture" or "physical terrorist".

Most people fear the unknown. I would like to settle those fears and explain to you the importance of attending physical therapy and why you should take advantage of physical therapy services. I would like to start by saying that not all injuries, pain, or surgeries are the same. With that said, all physical therapy experiences are not the same.

Physical Therapy starts with an evaluation of the injury and/or problems that need to be treated. Upon the completion of the evaluation the physical therapist will develop a treatment plan and/or identify the appropriate physician protocol to follow after surgery to meet your needs. In my opinion, the most important thing a physical therapist should do is educate you about your injury or surgery. Not in medical terms, but in language that is easy for you to understand. Having an understanding of what the problem is or what procedure was performed helps you understand the problem and what treatment will help you.

The treatment will help decrease pain, increase range of motion and strength, and improve function with activities of daily living, work, or play. It will also help you learn which activities trigger pain and how to decrease them, or how to protect the surgical intervention. The therapist will develop a home exercise program to further your activity level and prevent further injuries. The treatment progression always takes into consideration your problems, questions, and level of comfort. Pain is a relevant response different to each individual. What is painful for some may not be for others. Pain is difficult at times to manage because you can't see it or touch it, you can only feel it.

The therapist will identify the cause of pain like muscle spasms, tight muscles, or inflammation, and use modalities to decrease the symptoms. Modalities commonly used in outpatient physical therapy clinics are electrical stimulation, ultrasound, manual therapy, therapeutic exercise, gait training, and iontophoresis.

Electrical stimulation uses electrical impulses to decrease pain, spasm, swelling, and increase a muscle's ability to contract, and improve blood flow/circulation to aide in healing.

Ultrasound is a form of deep heat using sound waves to heat deeper tissues than you would get with a heating pad. This is effective to help with pain, stretching, range of motion, and with decreasing inflammation.

Manual therapy encompasses a variety of hands on techniques by the therapist. It includes, but is not limited to, joint mobility which helps with range of motion. Soft tissue mobilization/massage is used to decrease pain, spasm, adhesions with scar management, and increase flexibility. Manipulation or

positional release techniques are used to improve joint mobility and improve joint/spinal alignment. Trigger point techniques can also be used to decrease pain, and may vary by therapist training.

Therapeutic exercise is the exercise a therapist will prescribe for you to address your needs. The exercises will vary from simple stretching exercises to increase flexibility, or passive exercises to increase range of motion. Strengthening exercises are specific to your areas of weakness and will isolate specific muscle groups to increase strength. As you progress with strengthening exercises, the therapist will increase the intensity of the exercise to prepare you for returning to work or sports often mimicking the activities you perform on a daily basis. Most exercises work in straight planes in line with the body. However, most often with work or sports, we use our muscles in a diagonal plane. For instance, reaching across our body or twisting motions. The therapist will work with you on dynamic strength, exercising through these diagonal planes to help you prepare for your daily needs. These exercises will help develop coordination of the muscles that surround the joint. The muscles around a joint must work together to perform properly. For example, if you have three horses and hook them to a wagon, and the horses go in different directions, the wagon will not go forward and will not work well. You have to train those muscles to work together as you would the horses. This will allow for proper joint mechanics and maximum muscle strength to minimize risk of pain or injury.

Gait training is instruction to walk with a normal heel-toe sequence. Most often, with a lower extremity or back problem, the person limps not putting full or equal weight on both legs. The therapist will work to correct the gait sequence and promote normal walking. Often times limping will cause other problems or pain of the hip or back if not corrected. A significant number of people limp even after the original problem is resolved. They have limped so long that it has become more normal or has become a habit for them to do so. The therapist will give them techniques to promote a normal gait pattern.

Iontophoresis is most commonly used to treat an inflammatory problem. Dexamethasone is a medication used to treat inflammation. Iontophoresis is used to drive the medication through your pores down to the area to be treated instead of injecting the area. Iontophoresis, as a simplified example, uses two patches, one has the medication on it and the other completes the circuit. Remember back in chemistry class that like "charges" repel each other. When you try to put two magnets together they push each other away. This is how iontophoresis works. The Dexamethasone is a "negatively" charged drug so a "negative" electrode is connected to the patch with the medicine. Iontophoresis is generally used to treat plantar fasciitis, tennis elbow, patellar bursitis, and rotator cuff tendinitis.

There are many other modalities used in physical therapy to help address your needs. The physical therapist will decide what is best for your needs and will use the appropriate modalities to promote healing and the progression of your treatment. The therapist will work with you like a coach helping you to achieve your goals. The therapist uses his/her knowledge to help guide and

instruct you in the appropriate treatment program to achieve your goals. Decreasing or relieving pain is always the ultimate goal.

The therapist will also work with you to increase flexibility and range of motion, which is very important following surgery. The therapist's knowledge and familiarity with the physician's surgical procedure and postoperative protocol will help guide you to obtain the maximum range of motion, strength, and function protecting the surgical intervention. Once you have improved your range of motion, the therapist will initiate strengthening exercises. The therapist will identify the appropriate exercises for you, per the surgery protocol, to protect the surgical intervention. It is important for the therapist to monitor your progress and activity level for you to achieve your goals and reach your maximum functional abilities.

Going to physical therapy gives you the greatest opportunity to learn about your problem/injury or surgery, the guidance and treatment to return to your normal activities, and how to prevent further injuries. Take advantage of the opportunity to improve your quality of life and return to your normal activities when your physician refers you to physical therapy.