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First-line treatment for pain



PT can be both difficult and well worth it

By Andrew Will, MD

80 percent of Americans at some point in their life. By now, the thinking goes, shouldn't such a common problem have a quick solution?

In fact, old-fashioned exercises are the best place to start.

Exercises can be exhausting and usually require several meetings with the physical therapist in order to master them. Patients often say, "Doctor, I work every day going here and there, moving this and that. I don't need any exercise, I just need pain relief." This is when I have to remind them that what they are describing I would classify as "work" and not "therapeutic exercises."

Therapeutic exercises are not typically obvious to patients. Nor are they usually taught in medical schools. Unless doctors specialize in pain management or work with physical thera-

pists, they usually are not exposed to these exercises. I explain the benefits to my patients like this: Many treatments for pain address the symptoms but not the underlying cause of the pain. Therapeutic exercises address some of the root causes of pain by aligning the body so there is not unequal wear and tear and by getting the muscles to their proper resting length so they can function efficiently without tension or tightness. A car analogy is helpful here: If you wear out the right front tire of your car and replace the tire, it will wear out again unless you align the front end. To "align the front end," patients need to learn therapeutic exercises from a skilled clinician.

Most often a certified physical therapist is best suited to teach these exercises. Physical therapists often spend their whole appointment with the patient explaining how to do the exercises, demonstrating the exercises, and then observing the patient doing the exercises. This is the only way the patient can know that he or she has really learned the appropriate exercise techniques.

This may sound a lot like "personal trainers," which are popular in fitness clubs. However, as described above, there is a difference between general exercises for getting in shape and therapeutic exercises that treat an injury or medical problem and reduce pain. Physical therapists must have an undergraduate degree and then complete a two-and-a-half-year master's

The musculoskeletal and neurological systems are the organ systems most commonly involved in acute and chronic pain. As a general rule, physical therapy is the first-line treatment for most acute or chronic pain problems, after tests to evaluate the problem—such as a physical exam, x-rays, MRIs, or blood tests—have been performed.

People often assume, in light of technological advances, that there is something better to treat their pain. Back pain, for example, is the most common pain problem. It affects over

degree program in physical therapy. Now virtually all new graduates complete an additional year of training for a doctoral degree before they start working. While a doctorate is not required to work as a PT, the competitive market basically means all new PTs need one to get a job.

Why so much education? Because to maximize the value of physical therapy, a provider needs to understand what can go wrong in the body as well as the medical aspect of exercises. Unlike personal trainers, who do not have specific educational requirements for work that is limited to teaching healthy people how to exercise and get into shape, physical therapists understand how the body works, how it can go wrong, and how to repair or minimize pain and other medical problems, primarily via therapeutic exercises.

Most physical therapists develop a subspecialty in an area such as stroke rehabilitation, spinal cord injuries, brain injuries, orthopedics, cardiac, or pain management. Physical therapists specialized in pain management are skilled at treating back or neck pain, the most common pain problems seen in most medical clinics. Other frequent patients are people who have pain in the head, arms, or legs.

There are two primary approaches to treating pain via physical therapy—passive and active. With passive treatments, the physical therapist is “doing all the work.” Examples would include applying hot or cold packs, massaging muscle spasms, or applying electricity using electric stimulators or TENS units. These passive therapies are very helpful for most patients, especially early on when the patient is in too much pain to participate in more aggressive therapies.

Injured or diseased areas, like lumbar spines with disc degeneration (a common form of “wear and tear”), often experience a lot of muscle spasm, which is the body’s way of guarding or protecting the injured or diseased part. The dilemma is that, although these muscle spasms develop as a protective mechanism, they become the problem

when they persist. A chronically tight muscle is difficult for blood to circulate through, so it is prone to inadequate blood flow and lactic acid buildup, which result in more pain. Passive physical therapy techniques improve blood flow with heat and massage. Other treatments such as cold therapy can reduce inflammation, thereby reducing the tendency to spasm. Electric stimulation can interrupt the pain signal so that the brain does not sense the pain and therefore the muscles do not tend to spasm as much. So passive techniques can be very helpful and are a critical part of any patient’s treatment plan, especially in the beginning.

Long-term, it’s important for patients to transition to more active physical therapy. In active therapy, the patient performs the majority of the work. The physical therapist is more of a teacher, helping the patient learn exercises to be done at home. Fortunately, most of the active exercises require minimal equipment. A Swiss ball, Thera-Bands (wide elastic bands used for resistance exercises), and other devices used for home exercises all are relatively low-cost items.

Several unique types of active physical therapy for neck and back pain have become popular over the last couple of decades because of their effectiveness. Among them is MedX therapy, which is a specialized device available only in doctors’ or physical therapists’ clinics. The MedX machine enables the patient to isolate neck and back muscles that need strengthening exercises. Patients are often able to get control of their pain with this and then graduate to a home exercise program.

Many pain problems, particularly back pain, tend to recur. Therefore, it is worth learning the exercises and remembering them so that you can do them either as a maintenance routine or as a treatment when pain flares up. The exercises can be difficult to learn and even harder to remember a year later, so I advise patients to pay close attention and to save any notes or instructional materials they get from

the physical therapist. However, the patients who benefit most from physical therapy are those who keep the exercises fresh in their memory.

At my initial meetings with patients, I ask them to describe what they learned from physical therapy they have already completed. Many will say, “I don’t know, but I have dozens of handouts at home.” To me this indicates that the patient probably never did the exercises on a regular basis. To perform an exercise routine on a regular basis, one needs to memorize the exercises. This is hard work, so I understand why patients often groan when physical therapy is recommended to treat their pain problem.

Nonetheless, physical therapy is one of the best options. It is the most natural treatment for pain. Unlike medications, it is rare for physical therapy to cause side effects such as nausea, constipation, or drowsiness. Also, it is very rare for patients to get “addicted” to exercise, and it is usually a good thing if patients develop a habit of exercising daily. Furthermore, physical therapy is something patients can use for the rest of their lives. The same cannot always be said for treatments that require a medical professional to deliver, such as injections, chiropractic manipulation, or acupuncture. Although these are also useful pain management techniques, they are difficult to use as maintenance therapy without recurring visits to the health care provider.

Insurance companies have recognized the benefit of physical therapy. In 2007 many insurers in Minnesota began requiring that most patients participate in physical therapy before they would authorize more advanced tests, such as MRIs. While physical therapy may not be the solution for every patient in pain, it is most often the best place to start. ◼

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