

November 2011

Benefits of Physical Therapy for Lupus Patients



Systemic lupus erythematosus (SLE or lupus) is a **chronic, autoimmune inflammatory disease that can affect almost any organ system in the body**. It most often develops in women during their childbearing years. Currently, there is no cure for lupus, but treatment can reduce symptoms. These frequently occur in a cycle of flare-ups and remissions. Because sunlight can cause symptoms to flare, limiting sun exposure by wearing sunscreen or exercising

indoors is essential. Lupus symptoms of joint pain, joint stiffness and fatigue often cause people to reduce their daily activities or stop exercising altogether, which can make symptoms worse.

A supervised exercise program of gentle flexibility, strength and endurance training benefits many people with lupus, especially when combined with heat modalities. Appropriate exercises can

- **improve range of motion and reduce joint stiffness**
- **strengthen tendons, ligaments and muscles to stabilize joints**
- **help maintain strong bones and avoid the osteoporosis often caused by drugs commonly prescribed to treat inflammation caused by lupus**
- **improve or maintain cardiac health because heart disease is the leading cause of death in people with lupus**
- **reduce the tendency to gain weight because extra pounds put more stress on inflamed joints**
- **improve sleep patterns, mood and general outlook on life by releasing endorphins and decreasing stress**

Because lupus must be approached on an individual basis and exercising with lupus is not without risk, we can design a program of exercises appropriate to your level of fitness and pain after consulting with your physician. When symptoms flare, we can help you engage in the correct amount of exercise and suggest alternatives to endurance and strengthening exercises that can aggravate swollen joints. The good news is that, despite the many ups and downs of lupus, early intervention can keep it at bay and make the condition more manageable.

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Recovering After Elbow Surgery



Elbow surgery to reconstruct a torn ulnar collateral ligament (UCL) is a common procedure performed on **athletes who engage in overhead throwing activities**, such as baseball, tennis and volleyball, and gymnastics. In these activities, the UCL can be stretched, torn or otherwise damaged from the constant stress of overhead motion. To mend a torn UCL, **a damaged ligament in the elbow is surgically replaced with a tendon from somewhere else in the body**, such as a

hamstring or forearm. A nontraumatic UCL tear should be treated with rest followed by a rehabilitation program for about six months before surgical intervention is considered.

While surgery aims to restore elbow stability and enable the athlete to return to his or her sport as soon as possible, recovery can often take as long as a year. A 2010 study of athletes who underwent the surgery over a 19-year period showed that after surgery and physical therapy, 83% returned to play at or above their previous level an average of 11.6 months after surgery.

Thus, it is critical to involve physical therapists early in the recovery process. An individually designed rehabilitation program will likely include

- **gentle handgrip, shoulder and wrist mobilization exercises**
- **a special hinged brace to protect the elbow**
- **range-of-motion (ROM) exercises to be performed daily**
- **strengthening exercises for the shoulder, arm, wrist and hand**
- **monitored flexibility and conditioning exercises to support proper throwing techniques**

Most athletes who follow a formal physical therapy rehabilitation program can expect to attain their previous full ROM. As rehabilitation progresses, we will gradually increase the strength-training exercises with heavier weights and exercises that use all parts of the arm. Another benefit of physical therapy is that you will learn to perform **cardiovascular exercises** to ensure maintenance of your overall fitness.

With a dedicated physical therapy program, 70% to 95% of athletes tearing their UCL return to play at or above previous levels. With our guidance, you may find that you can return to your sport even stronger than before.

November 2011

Jump on Treating Osgood-Schlatter Disease



Osgood-Schlatter disease (syndrome), a common cause of knee pain in as many as one in five children and young athletes, especially boys, 10 to 15 years of age, usually occurs **after a period of quick growth coupled with intense physical or sporting activity**. Children who participate in running and jumping activities experience a greater strain on the patellar tendon, leading to inflammation and pain when it pulls the patella away from the shinbone. To close the gap, the

body produces new bone, creating a bony lump. The condition usually clears up once growth stops and the tendons are stronger, but it can continue into adulthood.

While Osgood-Schlatter disease typically occurs in just one knee, it sometimes develops in both knees. The discomfort can last from weeks to months and may recur until the growth period has ended. Symptoms include **pain, swelling and tenderness at the bony prominence just below the kneecap**, and **tightness of the surrounding muscles**, especially the quadriceps in the thigh. This pain worsens with activity, such as running, jumping and climbing stairs, and improves with rest.

Depending on the severity of the disease, techniques that can help reduce the child's discomfort might include

- **rest and immobilization as needed during bouts of pain**
- **ice after physical activity**
- **anti-inflammatory and pain-relieving medications as prescribed by their physician**
- **a knee brace with a patellar tendon strap below the kneecap to stabilize the patellar tendon during activities and distribute force away from the shinbone**
- **stretching exercises for the quadriceps and hamstrings**
- **a contoured pad to protect the knee in more severe cases**

It is important that your child avoid activities that cause a lot of pain, especially ones that involve a great amount of jumping, squatting or kneeling. Weight-bearing exercises can worsen symptoms. Although the injury can be upsetting to children and athletes who suffer from its effects, a tailored program of physical therapy and appropriate rest can relieve symptoms until the process resolves.

November 2011

Avoiding Repeated Ankle Sprains



You may have sprained your ankle several times during the past year and often feel a sensation of weakness, as though you are in danger of spraining it again. When you have had one sprain, other sprains may follow, indicating the presence of a condition called **chronic ankle instability**. Is there a way to make it feel normal for good?

The ankle **ligaments**, rope-like bands of tissue that connect the bones, are unstable. Those on the outside of the ankle are most often affected when the ankle abruptly rolls to the outside of the foot (called an **inversion sprain**). The less common but just as damaging **eversion sprain** occurs when the ankle rolls to the inside.

A sprain occurs when you lose your balance, your ankle turns and the ligaments are stretched or completely torn. If the ligaments do not heal fully before you face another situation in which a sprain might occur, they will be more susceptible to injury or completely torn, thus perpetuating the cycle of instability.

After prompt treatment of the initial sprain with **PRICE** (**P**rotection, **R**est, **I**ce, **C**ompression and **E**levation), physical therapy can begin, including

- **massage, compression and elevation to reduce swelling**
- **active and passive techniques to regain lost range of motion**
- **gentle strength-training exercises to strengthen the peroneal leg muscles adjacent to the injured tendons and offer more control over the full ankle joint**
- **exercises to help regain proprioception, or “position sense,” using the nervous system to instinctively sense when your ankle truly is and is not stable**
- **exercises to normalize walking patterns and improve balance**

A heel wedge can **prevent the ankle from turning in or out**; a plastic ankle brace can prevent unsteadiness, as can ankle taping. Even high-top sneakers **provide some stability**. Wearing high heels is not recommended for women with ankle instability.

Once swelling subsides and you can move your ankle, we can design a series of exercises to minimize the risk of additional sprains and help prevent falls. We can assess your situation and begin therapy to achieve the best outcome.

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Dive Into Water Therapy After Hip Replacement



So you are facing hip replacement surgery, and your physician has recommended water therapy as a form of rehabilitation. You are hesitant, but the facts are that **water therapy uses the physical properties of water to assist in patient healing and exercise performance.** It can be a very safe, effective method of rehabilitation after hip replacement.

Water therapy is beneficial because it provides resistance without the usual wear and tear on joints. While free weights and circuit training offer resistance, the joints must endure a fair amount of “jarring” with these methods. In contrast, exercises in water offer a natural form of resistance with **decreased stress on the joints**, making for an environment more conducive to safe, effective exercise and physical therapy.

Benefits include **decreased swelling** and **improved joint position** due to hydrostatic pressure during water therapy. The warmth of the water also **relaxes the muscles** and **opens up (dilates) blood vessels**, thus increasing blood flow to injured areas of the body. Water therapy is also very **effective for those who lack strength in their core muscles** and have difficulty standing or walking.

As with any exercise or physical therapy program, there are methods that enhance the safety and effectiveness of the therapy routine. During the first week, the emphasis should be on restoring range of motion. You will be gently encouraged to perform **toe lifts** and **gentle hip cycles**. In the second and third weeks, the pace and duration of workouts will usually increase as new exercises are introduced, including **calf and hamstring stretches**. The intensity of exercise will rise significantly during weeks four through six to continue improvement.

One note of caution: If you suffer from cardiac disease or hypertension, you may need to refrain from aquatic exercise because the increased blood flow may place added stress on the heart. If you are incontinent, you may have to avoid aquatic exercises altogether.

Water therapy is just one technique in the physical therapy arsenal to help you heal and return to your normal activities after surgery. We will gladly work with your surgeon to design a program that meets your fitness requirements under the safest conditions.