

July 2014

Mending Your Torn Meniscus



The menisci are cartilages in the knee that **protect the joint from stresses of activity**. Pivoting actions that cause the knee to twist pose a risk for meniscus tears. The injury is common among tennis players, but it can also result from deep knee bending, squatting or lifting a heavy object.

If you have torn a meniscus, you may remember the moment of injury. There may have been a popping sound and immediate onset of pain, followed by swelling or stiffness, and difficulty moving or fully straightening your knee. Knee instability and persistent knee pain may also result. If, after a physical examination, your physician suspects a torn meniscus, he or she may order a magnetic resonance imaging (MRI) study to confirm the diagnosis.

Treatment of a torn meniscus depends on the severity and location of the tear. If your physician has suggested physical rehabilitation, your meniscus tear may be small or located on the outer edge of the cartilage where there is a good blood supply to the injured area. Nonsurgical interventions include

- **RICE** (rest, ice, compression, elevation)
- **nonsteroidal anti-inflammatory medications** (NSAIDs), if your physician prescribes, to provide pain relief and reduce swelling
- **therapeutic exercises** to strengthen muscles around the knee and in your legs that will provide stability and increase support to the knee joint

We may also suggest **orthotics** for your footwear that help distribute force more evenly around the knee and decrease excessive stress to certain parts of the joint. And because excessive body weight can aggravate a knee injury, we can design a **weight reduction diet** for you, if needed.

In some cases, the meniscus tear may be too severe for conservative treatment, and surgery may be recommended to either repair the tear or remove the damaged cartilage. In that event, a rehabilitation program followed for four to six weeks afterward can promote healing and strengthen the knee, protecting against future injury. A return to normal activity depends upon your willingness to work hard with us and to continue that work after your formal therapy has been completed.

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Nothing Odd About Eccentric Exercise



When you hear the term “eccentric,” you may think of a quirky aunt or a piece of shabby but chic furniture. In the physical therapy world, however, this term has a much different and very important meaning. Eccentric exercise—**active contraction of a muscle while it is lengthening**—has gained popularity in recent years among both athletes and the therapeutic community.

To understand the difference between concentric and eccentric exercise, think of it this way: When you lift a weight, your muscle contracts and shortens—this is called **concentric** movement. But when you lower the weight, those same muscle fibers lengthen while still bearing the weight, creating **eccentric** movement.

Although new machines promising a better eccentric training experience constantly appear on the market, there are plenty of simple ways to incorporate eccentric movements into your therapeutic routine. For example, doing a **slow squat and then rising** will work your quad muscles eccentrically; **slowly lowering a hand weight** is also a good eccentric exercise. Even something as low-tech as **walking down a hill** is great eccentric training.

Studies conducted over the last decade have suggested that eccentric training can be especially helpful in treating the elderly and people recovering from surgical repairs, as well as those with degenerative disorders of the central nervous system and tendon injuries. One study even found that a 12-week eccentric rehabilitation intervention was just as effective as surgery for people suffering from patellar tendinopathy (jumper’s knee), a common injury in athletes.

The great thing about utilizing eccentric exercise as part of your physical therapy is that it not only **strengthens muscles** but also **improves their function**. In fact, eccentric training **uses less energy while building more muscle** than concentric exercises.

So, whether you are a professional athlete or someone struggling through basic functions, such as sitting or climbing (or in this case, descending) a flight of stairs, the benefits of eccentric exercise are clear. We can design an individualized program of eccentric exercises that will help you recover from surgery or get through your daily activities stronger and free of pain.

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Take Heart: Exercising with Congestive Heart Failure



Congestive heart failure (CHF) forces patients to make significant life changes. And because the heart is a muscle and exercise is a vital part of heart health, it seems natural that physical therapy would be a great asset for these patients. But whether and how much physical therapy can help CHF patients depends on a great many variables. In some cases, we can be the best ally a patient can have. In others, the best treatment might be pharmaceutical or

surgical. Of course, you cannot know which treatment option is best without speaking with your health care providers.

When can physical therapy help with CHF? Strange as it may sound, the most useful thing we can help you with is telling you when NOT to exercise. Many patients with CHF suffer from exercise intolerance. Because of the heart's weakness, excessive strain can be dangerous.

On the other hand, physical therapy can help you live with CHF.

- We can help you build an exercise program that slowly and steadily **strengthens your heart**.
- If parts of your daily routines need to be changed, we can help you reorganize your life to **minimize the risk** to your heart.

Yet for patients with particularly severe CHF, strain can be the biggest threat to their health. Physical activity may not be recommended for patients who have severe CHF and lack the physical capacity to undertake it.

If you suffer from mild or moderate CHF, we can be your ally. As a key to your therapy, we can help keep you out of the hospital. Make sure you keep us up-to-date on your health status. That way, we can adjust your individualized exercise program to maximize the benefits when it needs to be changed. Together with your physician, we can work as a team to keep you in the best health.

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Restitching a Torn Rotator Cuff



Your rotator cuff is a collection of muscles and tendons located where your upper arm meets your shoulder socket. Its primary purpose is to provide structural support to your body so that you can perform a wide range of arm movements, especially ones that involve **overhead motion**. These include manual labor activities—painting and carpentry, for example—and sports such as baseball and tennis. As a person ages, the likelihood of a rotator cuff tear increases.

While such tears are serious and require treatment, it may surprise you to learn that surgery is often not a necessary part of the healing process. Pain and muscular dysfunction can often be **eliminated through physical therapy alone**.

Determining whether or not surgery is necessary depends on the type of rotator cuff tear. The depth of the injury can be either full-thickness or partial-thickness.

- **A full-thickness tear stretches clear through the tendon down to the bone.**
- **A partial-thickness tear is less severe and does not include a total separation of tissue.**

In the case of a partial-thickness tear, physical therapy is often **the only treatment necessary**. For a full-thickness tear, surgery may be required if physical therapy alone is not sufficient for healing and function.

Regardless of whether or not surgery is required, physical therapy is a necessary part of treatment for rotator cuff injuries. We can teach you exercises that will strengthen your muscles and tendons to help **restore a range of motion** and **build muscle endurance**. We can also help you to make the necessary **lifestyle changes** to avoid aggravating or injuring your cuff again.

Let us work with you and carefully monitor your progress. Physical therapy can postpone or eliminate the need for surgery altogether. And if surgery is needed, physical therapy can give you a faster and more complete recovery.

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Get the Skinny on Diets and Exercise



Diet and exercise go hand in hand for people who want to lose weight and maintain good health. High-protein diets, such as the Atkins and South Beach Diets, are popular because they generally result in quicker weight loss than do diets featuring more carbohydrates. But is the high fat content of a mostly protein diet bad for your heart and blood pressure? According to some experts, not necessarily.

A 2011 study by Johns Hopkins University showed that a short-term, high-fat diet had no negative impact on overall health. In fact, study team leader and exercise physiologist Kerry Stewart said that the key to maintaining healthy blood vessels and vascular function is less about the type of diet and more about maintaining healthy body weight, particularly when **exercise is included**. Other research suggests that fat may be **a more effective fuel source** for physical activity than carbohydrates and may **improve exercise performance**, especially in endurance events.

Stewart noted that low-fat diets—often believed to be healthier—may actually contribute to obesity, because they are less satisfying. As a result, people on these diets tend to overindulge in more low-fat food than they should. He recommends a diet based on high-quality fats rather than junk food or heavily processed foods. Full-fat dairy products from grass-fed cows, unprocessed red meats and coconut oils are some of the foods recommended for good nutrition and maintaining healthy weight.

However, high-protein diets put more stress on the kidneys and may worsen kidney function problems. Some researchers also believe osteoporosis is more likely to develop in people who eat large amounts of protein because they may excrete more calcium than normal through urination.

A healthy diet in which carbohydrates make up 30% of calories, and fats from meat, dairy products and nuts make up 40% of calories, along with moderate aerobic exercise and lifting weights, can help you lose weight. **Remember:** Lasting weight loss is usually based on changes you can live with for a long time, not a temporary diet.