PT @ Digest

June 2016

Active Treatment for Osteoporosis



t wasn't long ago that the only treatment for osteoporosis was taking medications along with calcium and vitamin D supplements. Current thinking, however, suggests that weight-bearing exercises are a vital component of osteoporosis treatment.

What does weight-bearing mean? It simply refers to any activity that requires the bones and muscles to withstand the effects of gravity (i.e., the impact of the total weight

of a body), such as brisk walking, jogging, mowing the lawn or climbing stairs. The old way of thinking restricted these activities for people with osteoporosis. Now these activities are encouraged. The more weight-bearing exercise one does, the more the bones must adapt to the impact and pull of muscles by **building more cells** and becoming stronger. If you limit the body's ability to strengthen itself, you are overlooking a key element of treatment.

We can design a physical therapy program that utilizes weight-bearing exercises useful for treating osteoporosis. Through low-impact, controlled exercise, the goal will be to **strengthen muscles** around the bones and **increase endurance** during daily activities. Performing aerobics, using an elliptical or stair-step machine, or walking at a brisk pace can build up your strength and allow you to move to more moderate-impact routines. In addition to those weight-bearing exercises, **strength training** is essential to better cope with the impacts of gravity. Examples include the use of

- elastic bands
- weights
- your own body weight

While yoga, Pilates and tai chi have also become popular low-impact programs that build your strength and endurance, some techniques are difficult and not suggested for individuals fighting the effects of osteoporosis.

If you have been diagnosed with osteoporosis, **make an appointment** to see us. With our knowledge of body mechanics and strength training, we can be a vital part of your path to better living.

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Hammering Out the Truth About Copper



Ithough people have believed in copper's curative power for arthritis and back pain for thousands of years, **no solid scientific evidence** proves that copper in bracelets or incorporated in back braces relieves joint or back discomfort. In fact, many studies have demonstrated that copper has no more impact on pain than does a placebo.

A back brace that contains copper may help back pain, but that's probably because the elastic supports trunk muscles. The copper doesn't add any benefit. Bracelets and copper-enhanced back braces may seem to fight arthritis because people with back pain and the most common forms of arthritis—including osteoarthritis—experience episodes that **wax and wane**. When people have painful flare-ups and don a copper bracelet, then feel better several days later, they may think that the bracelet is the reason why. Most likely the flare-up would have subsided on its own.

Also potentially powerful is **the placebo effect**. It's been scientifically shown that believing a treatment will work can truly influence how you feel (or how you think you feel), at least in the short term.

While a copper bracelet can't do any real harm, a back brace actually can—if you wear it excessively. While wearing a back brace during a short strenuous activity provides protection from strain, the artificial support it provides gives your trunk muscles much less to do, meaning long-term use can begin causing those muscles to atrophy, resulting in less core strength. The result: You'll be even more prone to back injury.

There are many **proven options** for treating back pain. For starters, you can work on improving your posture, your sleeping position and your core strength—all of which we can help you with. Consider using ice or heat for symptomatic relief, whichever feels better (ice is preferable after an acute injury).

If you have back pain, come see us. We can help you manage your condition and design a physical therapy program to help you **feel better** while **increasing your mobility and flexibility**.

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Raising the Stakes: Wearing High Heels After Foot Surgery



here's no denying the allure of a great pair of high heels. There's also no denying the power they have to wreak havoc on your feet. Many women considering foot surgery are concerned with how the procedure might affect their choice of footwear. The good news is that foot surgery for problems like bunions or plantar fasciitis may eventually make wearing high heels more comfortable. But the bad news is that the high heels may have contributed to

the need for foot surgery in the first place.

Your feet need to support the entire weight of your body, and the 26 bones, 33 joints and 100 tendons in your feet endure a lot of wear and tear. The shoes you wear affect **how your feet move**, which in turn affects your posture and how the rest of your body functions. Shoe heels that are too thick, too thin or too high force you to adjust your stride and the position of your foot while standing and walking. In one study, women who had a long history of wearing high heels tended to keep their feet in a toes-pointed, flexed position, causing shorter, tighter muscles in their calves.

High heels have also been found to cause other conditions that may necessitate surgery, including

- bunions
- hammertoes
- ankle sprains
- ligament tears

Fashion trends are what they are, and occasional high-heel use may indeed be possible after foot surgery, depending on your individual case. We will make sure your feet **are ready** for heels; most surgeons recommend wearing comfortable flat shoes for a period of time following surgery.

After surgery, we can help you restore flexibility, range of motion and strength in your feet, while also addressing the **physiological imbalances** caused by high-heel use. This way, when you do get back into your favorite pair of shoes, your body will be better prepared.

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Treating a Brain Aneurysm with Coiling



brain aneurysm, also known as a cerebral or intracranial aneurysm, can be a frightening diagnosis for a patient and his or her family. It means that a wall in a brain artery has a bulging weak spot. As blood flows past, thinning of this spot can increase, and a break—like an overfilled balloon popping—can occur. Ideally, the aneurysm is identified and treated before a life-threatening rupture happens.

When deciding on treatment for a newly diagnosed aneurysm, physicians take into account several factors, including

- the patient's age
- his or her overall physical condition
- family history of aneurysm
- the specifics of the aneurysm

One popular treatment option is endovascular embolization, also known as coiling. Coiling, in fact, can also be used to repair an aneurysm that has already ruptured.

Endovascular embolization is complicated surgery, involving tiny incisions, catheters and microcatheters, contrast dye, angiograms and constant x-ray visualization during the procedure. Ultimately, with the help of an electric current, the surgeon places platinum coils directly into the aneurysm. The coils **block blood flow** to that tiny area so blood no longer puts pressure on the artery wall that can possibly cause a rupture.

After coiling, the recovery process, including **gradual return to physical activity**, begins as soon as it's deemed safe. Physical therapy in the hospital generally starts with comfortable movement in a lying-down or sitting position, transitioning to sitting on the edge of the bed, standing and walking. Subsequently, the areas of focus include balance, posture, range of motion and activities of daily living.

Physical therapy continues after the patient is released from the hospital. Together with your physicians, we can **design a customized program** that allows further recovery, with exercises at home and/or at our facility. If the treatment was for an unruptured aneurysm, full activity can usually be resumed within a few weeks after surgery.

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Slapping Down a SLAP Tear



f you participate in sports that involve a repetitive overhead motion, such as baseball or weightlifting, you may be prone to developing a SLAP tear or SLAP lesion. SLAP, which stands for "superior labrum anterior to posterior," refers to the ring of cartilage that surrounds the shoulder joint. While repetitive shoulder motions often lead to injury, SLAP tears more frequently result from an acute injury such as a **fall on an outstretched arm** or from a shoulder

dislocation or motor vehicle accident. Depending on the severity of the injury, it can either be treated with physical therapy or surgery—but in either case, we will likely play a role in your recovery.

Symptoms of a SLAP tear include

- a clicking, popping or grinding sensation when moving the shoulder
- pain when moving your arm over your head
- a weak or unstable feeling in the shoulder

Magnetic resonance imaging (MRI) may be necessary to definitively diagnose a SLAP tear. Arthritis, tendinitis and rotator cuff disorders can also cause shoulder pain or weakness. It is common for some patients to have both a SLAP tear and another condition.

Conservative treatment is often effective for a SLAP tear. We can design an **individualized set of exercises** that focuses on reducing pain, stretching the connective tissue that surrounds the joint, restoring range of motion, strengthening the muscles that support your shoulder and improving stability. These exercises not only can **help relieve pain**, but also **prevent further injury** to your shoulder.

Should your physician decide that surgery is the best course of treatment for you, we will work with you in the days and weeks after surgery to **ensure complete healing**. We begin with gentle stretches to improve flexibility and range of motion, then proceed to exercises that strengthen your muscles.

Whether you and your physician choose conservative treatment or surgery, a complete course of **physical therapy is imperative** to restore shoulder function after a SLAP tear. We will be happy to work with you throughout the healing process to ensure that you can resume your usual activities free of pain and stiffness.