

February 2010

## Keeping Shoulder Pain at Bay



**S**houlder impingement syndrome can involve **bursitis** (inflammation of the shoulder's bursa), **tendinitis** (inflammation of the rotator cuff tendons), **calcium deposits in the tendons** or any combination of the three. People at risk include those who employ repeated overhead movements—tennis players, golfers, swimmers, construction workers and, quite commonly, those who perform do-it-yourself repairs around the home.

People with **hooked acromions** (the bony knob at the top of the shoulder blades) are more susceptible to shoulder impingement than others with flat or curved acromions. Because these people have smaller spaces beneath their acromions (called the subacromial space), nearby tendons have more opportunity to become compressed and painful.

Shoulder impingement can be treated successfully with rest, medication, physical therapy or surgery, depending on the severity of the condition. Anyone who has been treated successfully for shoulder impingement should continue a **maintenance routine** to maximize the chance that the problem will not return. Such a program should include

- **range-of-motion exercises**
- **exercises to keep the muscles of the shoulder strong**
- **the development and maintenance of shoulder-friendly posture**

We can create a program to give you the best chance of maintaining your shoulder pain free. Such a program might include **simple flexion and self-capsular stretches** with a rod to increase your flexibility. Isotonic or **muscle-tightening exercises** can be helpful as well; these allow you to build strength in your muscles without moving or stressing the involved shoulder joint. **Strengthening exercises** using elastic tubing to provide resistance help build the rotator cuff.

Chronic pain from shoulder impingement syndrome can be debilitating. However, by following a **carefully planned exercise regimen**, you often can regain your mobility, resume your usual activities and keep pain at bay.

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## Can I Exercise Safely with a Cold?



**T**he average adult gets one to six colds every year, with symptoms lasting a week to 10 days. Should you let these colds interrupt your exercise routine? Probably not, as long as you pay attention to what your body tells you.

The general rule for exercising with a cold is that **if symptoms are all above the neck, it is safe to exercise**. In other words, if your only symptoms are a runny or stuffy nose,

watery eyes and a mild sore throat, go ahead and exercise, but keep your routine low to moderate in intensity and briefer than usual. Studies have shown that light-to-moderate exercise has no effect on a cold—it neither prolongs nor shortens the duration of symptoms. High-intensity exercise, on the other hand, has a negative impact on the immune system and may prolong cold symptoms.

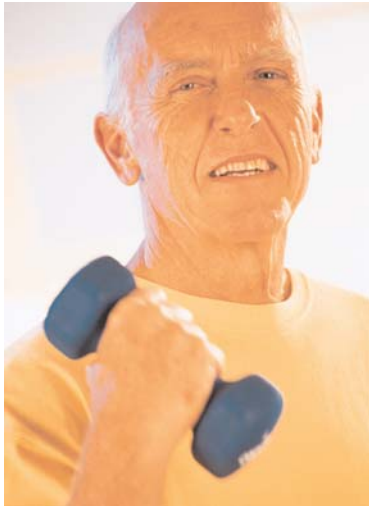
**If you have any below-the-neck symptoms such as a cough, chest congestion, fever, vomiting, diarrhea or body ache, then it is time to take a few days off.** It is especially important to stop exercising if you have a fever because fever is an indication that the body is fighting an infection. When you have below-the-neck symptoms, support your immune system by getting plenty of rest, staying hydrated and eating nutritious food. Return to exercising gradually once symptoms disappear.

Although it is safe to exercise with a cold, please consider the health of your fellow exercisers. Cold viruses are easily transmitted and can live on hard surfaces such as exercise equipment for an hour or more. As a courtesy to your colleagues, try changing your workout to one that uses little or no equipment.

If you suffer from a cold, we can design a “cold workout” appropriate to your level of fitness. You may even find you enjoy the change in routine, and your fellow exercisers will thank you.

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## Maintaining Bone Health as We Age



**T**he National Osteoporosis Foundation estimates that osteoporosis is a major health threat for 55% of people 50 years of age or older. Ten million people—80% of them women—have osteoporosis, and almost 34 million people have low bone mass and are at an increased risk to develop the disease. With one in two women and one in four men over the age of 50 experiencing an osteoporosis-related fracture in their lifetime, this means that there will be a lot of broken bones.

Good bone health is important to maintain independence as we age. While there is no magic bullet to keep bones strong, one relatively new approach is zoledronic acid, administered as a once-a-year injection. Along with a good diet and weight-bearing exercises, it can help keep osteoporosis in check.

Bone is living tissue that is constantly being built up and destroyed. As we age, bone destruction outpaces new bone formation, leading to weak, easily broken bones. **Used to prevent or slow this process by stimulating the body to form more new bone, zoledronic acid is given intravenously by a health care professional.** Not everyone can take this drug, and it may cause side effects, so talk to your physician about whether zoledronic acid is right for you. Other bisphosphonates, which can be taken orally, may be used.

It is not enough to simply get a yearly zoledronic acid injection or oral medication and then forget about your bone health. **To form new bone, your body needs calcium, a mineral most people get too little of in their diet.** Daily calcium and vitamin D supplements usually are recommended to support bone building. Your family physician can tell you how much of these supplements you should take.

**The final key to good bone health is engaging in weight-bearing exercise on a regular basis.** Exercises that make your muscles work against gravity, such as walking, jogging, aerobics and weight lifting, strengthen bones and stimulate new bone formation. Studies have shown that moderate weight lifting produces significant benefits in older individuals, even if they do not begin to exercise with weights until their 70s, 80s or even 90s. Regardless of your age or physical limitations, we can develop an individualized program to improve your strength, balance and bone health.

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## Safe Exercise for Patients with Diabetes



**E**xercise is as important for those with diabetes as it is for anyone else. The goal of most exercise regimens should be to work out at a moderate intensity for 30 minutes at least five days a week.

Patients with diabetes, however, need to take several exercise-related precautions:

- **If you already have problems with your leg or foot nerves, choose exercises that will stress them as little as possible** such as biking, swimming, rowing or even chair exercises.

- **If you do not have foot problems, take preventive measures.** Choose athletic shoes that fit well and are not too tight, and wear comfortable cotton socks. After your workouts, visually check your feet carefully for any cuts, blisters, sores or minor irritations. Because people with diabetes can be less sensitive than others to foot pain, you need to do this so you can treat any irregularity at its inception, before it develops into something difficult to heal.
- **Avoid working with heavy weights if you have high blood pressure or diabetes-related blood vessel or eye complications.**
- **Track your blood sugar before, during and after exercise.** To avoid possibly damaging blood sugar swings, you need to learn how your body responds to exercise. Work with your physician to determine specific guidelines for you to follow.
- **Prepare for any incidence of hypoglycemia (low blood sugar) while you are exercising—as at any other time—by always having a source of 15 grams of fast-acting carbohydrates on hand.** The most portable include two tablespoons of raisins, five pieces of hard candy or three five-gram glucose tablets. Consider having a second helping available, in case you still do not feel better 15 minutes after taking the first.
- **Stay hydrated by drinking lots of fluids before, during and after exercise, as well.**

If you have diabetes, see us for an individualized program that will take into account your current fitness level and fitness goals. Such a regimen will help maintain your blood sugar levels, increase your strength and range of motion, flexibility, gait, balance, posture, joint mobility and soft-tissue tightness, to reduce the risk of falling and the injuries caused by those falls.

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## Total Knee Replacement with a Hybrid Joint



If you are scheduled to undergo knee replacement surgery, your surgeon has three procedures from which to choose. An artificial knee can be held in place, or fixed, using a **cemented, noncemented** or **hybrid** procedure. Your surgeon will decide which procedure is best for you.

**The cemented procedure is the most common and produces excellent long-term results, with up to 95% of patients**

**experiencing pain-free knee function for at least 10 years.** In this procedure, a grout-like material is inserted between the bone and the prosthesis. As it hardens, it creates a strong bond that holds the artificial knee in place. This allows you to bear weight on the knee immediately. The disadvantages are that the prosthesis may loosen and/or bits of bone cement may shed into the joint, causing inflammation and destruction of bone. Both conditions require surgery to correct.

**A noncemented procedure uses a porous prosthesis coated with material that stimulates bone cells to grow into it.** The prosthesis and the bone are held together with screws while new bone grows and joins the implant to natural bone. Until this happens, you may be more restricted in weight bearing to enhance ingrowth of bone, making the recovery period longer. Short-term outcome studies have shown that noncemented fixation has success rates comparable to those using cement.

**The hybrid procedure is designed to minimize the problems of both the cemented and noncemented procedures.** The connections between the lower leg (tibia) and the prosthesis, and the kneecap (patella) and the prosthesis are cemented because this is where most noncemented joints fail. The connection between the thighbone (femur) and the prosthesis is not cemented because a strong cement-free joint tends to form here.

These three types of knee fixation all require different rehabilitation strategies to produce the most functional pain-free joint. We can work with your surgeon to develop a rehabilitation program that increases motion in the knee following surgery, prevents the muscle loss inevitable after surgery, rebuilds muscle strength and prevents stiffness of the new knee joint.