

March 2010

## Don't Let Shoulder Pain Burden Your Sleep



If shoulder pain keeps you up at night, then it is time to determine the underlying problem and develop a strategy to get a better night's sleep. For many people, shoulder pain that is particularly noticeable at night is associated with rotator cuff irritation.

The rotator cuff includes the muscles and their tendons that **keep your shoulder stabilized**. Its important role in facilitating shoulder movement means that an injury can

have a big impact on sleep and daily living. The typical rotator cuff injury impedes the normal range of motion (ROM) for the shoulder joint, making simple actions such as reaching overhead or even putting on a jacket painful.

If your sleeping posture is already poor, you can exacerbate a rotator cuff injury. Even if you maintain a healthy posture, the wrong movements and positioning can make you awoken with pain. These can

- **prevent full recovery for the injured rotator cuff**
- **increase the time needed to regain normal ROM**
- **put the shoulder under additional stress**

To make matters worse, while you sleep your shoulder can become trapped under your head and kept in a locked position for the duration of the night. This can result in reduced blood flow to the joint or cause muscle cramps.

Whether your pain comes from irritation or tear of the rotator cuff, we can design a program to help **relieve your discomfort**. Approaches may include

- **modifying sleep posture** (placing a pillow between your elbow and trunk)
- **choosing a pillow of the correct height and fill**
- **ensuring that your arm does not end up underneath the pillow**
- **strengthening your shoulder muscles**

Visit our office to find the best strategies to handle your shoulder pain. You deserve a good night's rest, and with our support, you can soon enjoy a better, pain-free sleep.

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## Take Care of Your New Hip



**W**hile hip pain and stiffness that interfere with daily activities may be alleviated with medication, your physician may recommend total hip replacement to relieve pain and restore function. Hip replacement surgery is generally safe and effective. But **you must do your part** to make the procedure a success.

Physical therapy is essential to recovery. We will work with your physician to develop a program that helps **restore range of motion, strengthen the hip, improve balance and increase endurance**. Together, we can get you back to doing the things you love.

During recovery, you must take some precautions to reduce the likelihood of hip dislocation and other complications.

- **Always sit so that the hips are higher than the knees.** You may need an elevated toilet seat and a new chair to do this.
- **Avoid bending from the waist** to tie your shoes or pick things up off the floor. Use a long-handled grabber that allows you to reach without bending.
- **Remove throw rugs** and obstacles that could cause a fall.
- **Keep your legs straight in bed** by putting a pillow between your knees.
- **Keep feet straight when sitting**, and avoid crossing your ankles or legs.
- **Follow your physician's instructions** concerning weight bearing. Different types of artificial joints have different weight-bearing restrictions.
- **Take any blood-thinning medications** prescribed by your physician to help prevent blood clots from forming in the legs.
- **Call your physician immediately** at any sign of redness, swelling or pain in the leg or ankle, or if you develop a fever.
- **Keep all physical therapy appointments**, and follow your prescribed home-exercise program.

Talk to us about your rehabilitation progress and any concerns you might have. We want you to understand your program and help you return to an active daily life.

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## Will the Wii Fit Keep Me in Shape?



**W**ii Fit is a video game by Nintendo designed to get gamers off the couch and improve their fitness. Using the Wii Balance Board, players play mini-games in four fitness areas: **yoga, aerobics, strength training** and **balance**. The Wii Balance Board records body mass index and length of time the games are played, and tracks performance.

Many people find the Wii Fit mini-games to be fun, and they do involve more physical activity than traditional video games. But when it comes to Wii's usefulness as a fitness tool, the game has supporters and detractors.

Supporters say that **the whole family can use Wii Fit**. The emphasis on controlled movement rather than exertion makes Wii Fit especially good for older people and those who are out of shape or reluctant to exercise in public. The convenience and the fun factor keep people coming back, and they can monitor their progress on the tracking feature.

Detractors say that **the activity level does not rise to the level of a real workout**. A study sponsored by the American Council on Exercise measured the physiological response to six most challenging Wii Fit mini-games:

- **Free Run**
- **Island Run**
- **Free Step**
- **Advanced Step**
- **Super Hula Hoop**
- **Rhythm Boxing**

Their conclusion? The required energy expenditure fell below the American College of Sports Medicine guidelines and provided only a **very mild workout**. The game did, however, win praise from fitness professionals for the yoga poses and balance games designed to improve body awareness and posture.

Wii Fit is fun and does have some benefits, but it should be **combined with, not replace, other types of exercise**. We can design a workout for your level of fitness that combines Wii Fit and traditional exercise.

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## Stretching Before Exercise: Should You Bother?



**T**o stretch or not to stretch? That is the question. Since the 1970s, everyone from Little League coaches to professional trainers has promoted the benefits of stretching as a warm-up before exercise.

Recent research has produced evidence that **static stretching before exercise does nothing to prevent injury** and may be disadvantageous to performance. This is not to say that athletes should not warm up.

There is general agreement that increasing blood flow and body temperature before significant exercise is important. Now the question is whether static stretching is the best way to do this.

Stretching elongates muscles. In static stretching, the muscle is slowly elongated and then held at full extension for up to 30 seconds. This increases range of motion, which in turn increases flexibility. The assumption has been that increased flexibility translates into fewer injuries and improved performance. However, a 2004 American College of Sports Medicine review of the medical literature on stretching concluded that **stretching was not associated with a significant reduction in injuries**, although there was not enough evidence to endorse discontinuing the practice.

More recently, some studies have suggested that static stretching before exercise can cause minute tears in muscle fibers that ultimately decrease performance. In addition, stretching has been shown not to significantly decrease post-exercise muscle soreness. Those advocating against static stretching suggest instead that exercisers should increase circulation and body temperature by **beginning whatever exercise they intend to perform slowly** and then gradually move on to increasingly intense exercise. Runners, for example, should warm up with light jogging. Kettlebell users should begin with easy, controlled swings and a light load.

To stretch or not to stretch? Talk with us about the kind of activities you perform, your performance level and your workout routine. By keeping up with the latest medical findings, we can apply them to your individual situation and develop a program that is right for you.

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## Osteotomy: Aligning the Leg to Treat Arthritis



**T**he strongest joint in the body, the knee can bear forces of more than twice your body weight. When the thighbone (femur), knee and shinbone (tibia) are properly aligned, weight is distributed equally over the knee. However, degenerative arthritis, osteoarthritis or tearing and repair of the anterior cruciate ligament can result in an uneven distribution of weight.

When weight bearing is uneven, the side of the knee carrying the most weight wears down faster than the opposite side. You become **bow-legged** (genu varum) when greater weight is shifted to the inside of the knee, or **knock-kneed** (genu valgum) when weight is shifted to the outside compartment.

The problem is self-perpetuating. Misalignment produces uneven weight distribution, which causes uneven wear that creates even greater misalignment, until eventually the knee becomes disablingly painful. At this point, you have two choices: total knee replacement or **osteotomy**, a surgical procedure to realign the leg. In an osteotomy, the surgeon removes or inserts a wedge of bone from either the tibia or femur so that the **realigned leg equalizes weight bearing** in the knee.

Knee osteotomy is most successful in patients who are

- **younger than 60 years of age**
- **physically active**
- **have arthritis only on one side of the knee**
- **have healthy bones**

Osteotomy can **reduce or eliminate pain and restore function**, but it is not a permanent fix. About 20% of people who undergo osteotomy need total knee replacement after five years, and 50% need total knee replacement after 10 years.

Recovery from osteotomy generally takes three to six months and requires extensive physical therapy, beginning with **range-of-motion exercises** and progressing to **strengthening exercises** and **gait training**. We will work with you and your physician following surgery to devise a rehabilitation program to restore full joint function and relieve pain.