Vol. 4 Issue 2

PT Matters

A Quarterly Publication of McDonald Physical Therapy & Sports Rehabilitation Center

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McDonald Physical Therapy & Sports Rehab Center
Hours
Monday - Thursday
7 a.m. – 1 p.m.
2 p.m. – 8 p.m.
Friday
7 a.m. – 5 p.m.
CLOSED FOR LUNCH
Times may vary, please call.

WE ARE LISTENING

Beginning with the first week of August we will hold patient feedback sessions each Tuesday and Wednesday at 2 PM. If you have questions, observations, or wish clarification on other clinic matters, please join us.

Visit us on the web at
www.McDonaldPT.com

I usually use this space in the newsletter to share a personal story relating it in some way to my growth as a person and the role this growth had on the development of our clinic.

This newsletter develops a different theme. This letter is about the importance of patients **taking charge** of their health and their health care.

Let me make my point as simply and clearly as possible: **As patients, you do have a choice when it comes to your physician – especially your specialists, such as orthopedic and general surgeons. You also have the right to choose in deciding where you go for your physical therapy.**

A patient of our clinic recently wrote a letter to me about his experience after having two total knee replacement surgeries. In his letter he stresses the importance of how he took control in deciding where he went for his physical therapy. He also shows how difficult it was to get his way. Obviously, he felt strongly about our services. Our staff and I deeply appreciated his letter.

I hope you will gain some insight and maybe even a boost of personal strength from this letter the next time anyone tries to tell you where to go for physical therapy service, if it is not where you prefer to go.

Frances J McDonald PT

Fran,

I have recently been the recipient of two total knee replacements. Part of the recovery process requires physical therapy. This is an important step in getting back to normal – as we know it. After each total knee replacement surgery, the doctor tried to insist I go to the physical therapy facility connected with his office. Right away I questioned his insistence. I stated that I knew of an independent physical therapy facility of which I am familiar with both the staff and the facility. The doctor again tried to pressure me to use his choice of facility. I said, "I believe in the independent facility and that is where I will go to do my physical therapy!" After a few minutes of debate with the doctor, I prevailed.

The bottom line is we as patients are ultimately responsible for the leftover balances if insurance doesn't pay the total costs. We have choices and should not be intimidated by the doctor(s). My thought is, if you have a confidence level with the rehab staff and facility of your choice, your recovery success rate is increased tremendously.

I have shared my thoughts in the hope of educating patients of the fact that we have choices in most cases where we do our rehabilitation physical therapy. I suggest that we not be intimidated by the doctor(s). In the end we have to know we did everything within our power to get back to 100% as we know it to be.

Timothy Joe Maurer

PHYSICAL THERAPISTS' TIPS FOR PROPER BIKE FIT

Poor Fit Can Contribute to Pain and Injury

For the estimated 85 million weekend bicycle enthusiasts and competitive riders in the United States, the risk of a bicycle-related injury may increase with an ill-fitting bicycle, says the American Physical Therapy Association (APTA).

APTA member Erik Moen, PT, CSCS, a Seattle-based "Elite Level" coach through the United States Cycling Federation, says, "The first thing I ask any patient complaining of bicycling-related pain is to bring the bicycle in to check for a proper fit. In most instances, a poor bike fit is at the root of their problem."

Moen says that the most common bike fit errors include saddle heights that are either too high or too low, handlebar reach that is either too long or too short, and misalignments of the pedal and shoe. He recommends that cyclists do the following to ensure that they have proper bike fit:

Saddle. Be sure that the saddle is level. If you are sliding too far forward from a forward-tilting saddle, too much weight is being placed on your hands, arms, and lower back. If the seat is tilted backwards, you may place undue strain on your lower back and possibly experience saddle-related pain. The saddle also should be a comfortable distance from the handlebars. If it is too close, you place extra weight on the mid-back and arms; too far away and extra strain may be placed on the lower back and neck.

Handlebars. Handlebar position will affect hand, shoulder, neck, and back comfort. The higher the handlebars, the more weight will be placed on the saddle. Generally, taller riders should have lower handlebars in relation to the height of the saddle. According to Moen, "Proper handlebar position allows for shoulders to roughly make a 90 degree angle between the humerus and trunk." Trunk angle for the road bike cyclist is 25-35 degrees and for comfort/recreational riding is 35-90 degrees.

Knee to Pedal. A physical therapist can also measure the angle of the knee to the pedal. The closer the angle is to 35 degrees, the better function the cyclist will have and with less stress on the knee. For the road cyclist, the angle should be 30-35 degrees. The recreational cyclist should have a 35-45 degree angle.

Foot to Pedal. The ball of the foot should be positioned over the pedal spindle for the best leverage, comfort, and efficiency. A stiff-soled shoe is best for comfort and performance.

"Pedaling is a skilled activity that requires aerobic conditioning," Moen says. "You should make it your goal to work toward pedaling at 80-90 revolutions per minute (advanced at 90-105 rpm). Pedaling at this rate will lessen your chance of injury."

APTA'S Tips for Avoiding Bike-Fit Related Injuries

Postural Tips

- Change hand position on the handlebars frequently for upper body comfort.
- Keep a controlled but relaxed grip of the handlebars.
- When pedaling, your knee should be slightly bent at the bottom of the pedal stroke. Avoid rocking your hips while pedaling.

Common Bicycling Pains

- **Anterior (Front) Knee Pain.** Possible causes: a saddle that is too low, pedaling at a low cadence (speed), using your quadriceps muscles too much in pedaling, misaligned bicycle cleat for those who use clipless pedals, and muscle imbalance in your legs (strong quadriceps and weak hamstrings).
- **Neck Pain.** Possible causes: poor handlebar or saddle position. A poorly placed handlebar might be too low, at too great a reach, or at too short a reach. A saddle with excessive downward tilt can be a source of neck pain.
- **Lower Back Pain.** Possible causes: inflexible hamstrings, low cadence, using your quadriceps muscles too much in pedaling, poor back strength, and too-long or too-low handlebars.
- **Hamstring Tendonitis.** Possible causes: inflexible hamstrings, high saddle, misaligned bicycle cleat, and poor hamstring strength.
- **Hand Numbness or Pain.** Possible causes: short-reach handlebars, poorly placed brake levers, and a downward tilt of the saddle.
- **Foot Numbness or Pain.** Possible causes: using quadriceps muscles too much in pedaling, low cadence, faulty foot mechanics, and misaligned bicycle cleat for those who use clipless pedals.
- **Ilio-Tibial Band Tendonitis.** Possible causes: too-high saddle, leg length difference, and misaligned bicycle cleat for those who use clipless pedals.

POSTURE TIPS FOR CAREGIVERS

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In past issues we have offered suggestions for proper form for lifting in the work place. One "place" and one form of "work" we failed to mention is important in so many ways.

Lifting and carrying a child, picking up toys off the floor, and pushing a stroller are normal daily tasks for caregivers. The American Physical Therapy Association (APTA) offers these tips to help moms and other caregivers accomplish these daily feats without aches and pains.

Lifting Your Child From the Floor

When picking your child up off the floor, you should use a half-kneel lift. First, stand close to your child on the floor. While **keeping your back straight, place one foot slightly forward of the other foot, and bend your hips and knees to lower yourself onto one knee.** Once down on the floor, grasp your child with both arms and hold him or her close to your body. Tighten your stomach muscles; push with your legs, and slowly return to the standing position. To place your child onto the floor, the same half-kneel technique should be performed.

Carrying/Holding Your Child

When holding or carrying your child, you should always **hold him or her close to your body and balanced in the center of your body. Avoid holding your child in one arm and balanced on your hip.** When using a child carrier, be sure to keep your back straight and your shoulders back to avoid straining your back and neck.

Picking up Toys from the Floor

As a caregiver, you will find yourself cleaning up after your child often. When picking toys up from the floor**, keep your head and back straight**, and while bending at your waist, extend one leg off the floor straight behind you.

Lifting Your Child Out of the Crib

If your child's crib has a rail that lowers, you will want it in the lowest position when lifting your child out of the crib. As you lift, **keep you feet shoulder-width apart, knees slightly bent. Arch your low back and, while keeping your head up, bend at your hips.** With both arms, grasp your child and hold him or her close to your chest. Straighten your hips so you are in an upright position, and then extend your knees to return to a full stand. To return your child to the crib, use the same technique and always remember to keep your child close to your chest.

Pushing a Stroller

When pushing your child in a stroller, **stay as close to the stroller as possible, allowing your back to remain straight and your shoulders back**. The force to push the stroller should come from your entire body, not just your arms. Avoid pushing the stroller too far ahead of you because this will cause you to hunch your back and shoulders forward.

Thoughts on Choosing a Workout Machine

If you are looking to burn more fat, then certain machines may be more effective. One study compared men and women exercising on six different types of cardio machines: the treadmill, stair-climber, bike, rower, ski machine, and rider. When all the subjects were working at the same intensity, the men burned the most calories while on the treadmill or ski machine. The women burned the most calories while on the treadmill, ski machine and rower.

Does that mean that the bike is worse than the treadmill? No. It means that if you have 15 minutes and you want to work at an effort level that feels somewhat hard, you will burn more calories on the treadmill. That's because you are carrying your own body weight by standing up and moving yourself. The bike supports some of your body weight and so saves you some energy, and results in fewer calories burned. But, you *can* burn the same amount of calories on the bike. You just have to work harder (pedal faster or add resistance) or extend your workout by another 5 or 10 minutes.

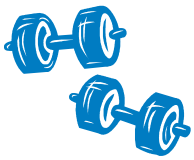
The elliptical trainer has several movement options: You can pedal forward or backward and add more resistance, greater speed or an increased hill-like slope. Exercise physiologist Len Kravitz, a professor at the University of New Mexico, measured physiological responses on the elliptical trainer. He found that men and women who took strides on the machine at a specific speed (125 or 135 strides per minute) burned the most calories when they were moving forward with added resistance, or moving forward at an increased speed (135 spm compared to 125 spm.) Using an elliptical while moving forward with resistance or speed would provide a similar intensity as running on a treadmill or using the ski machine.

So, if your aim for a workout is to reduce fat all over your body, focusing on cardio workouts is key. If you're pressed for time, you will burn more calories in the same amount of minutes by using one of the tougher cardio machines: the treadmill, ski machine or elliptical trainer. (Running on the treadmill will usually be the highest calorie burner.)

Exercise tips from the American Academy of Orthopedic Surgeons (AAOS) for "Baby Boomers"

The Health section at **http://poweryears.about.com/** *provides a full range of tips to help "Baby Boomers" start an exercise program and avoid sports injuries in the process. Here are just a few of the tips they suggest.*

- **Always take time to warm up and stretch before physical activity.** Research studies have shown that cold muscles are more prone to injury. Warm up with jumping jacks, stationary cycling or running or walking in place for 3 to 5 minutes. Then slowly and gently stretch, holding each stretch for 30 seconds.
- **Don't succumb to the "weekend warrior" syndrome.** Compressing your physical activity into two days sets you up for trouble and doesn't increase your fitness level. Try to get at least 30 minutes of moderate physical activity every day. If you're truly pressed for time, you can break it up into 10 minute chunks. Remember that moderate physical activity can include walking the dog, working in the garden, playing with the kids and taking the stairs instead of an elevator.



- **Take lessons and invest in good equipment.** Whether you're a beginner or have been playing a sport for a long time, lessons are a worthwhile investment. Proper form and instruction reduce the chance of developing an "overuse" injury like tendonitis or stress fractures.
- **Listen to your body.** As you age, you may find that you are not as flexible as you once were, or that you cannot tolerate the same types of activities that you did years ago. While no one is happy about getting older, you will be able to prevent injury by modifying your activity to accommodate your body's needs.
- **Use the 10 percent rule.** When changing your activity level, increase it in increments of no more than **10 percent per week**. If you normally walk 2 miles a day and want to increase your fitness level, don't try to suddenly walk 4 miles. Slowly build up to more miles each week until you reach your higher goal. Also remember to use the 10 percent rule as your guide for strength training, and increase your weights gradually.
- **Consult an orthopedic surgeon or sports medicine specialist if you have, or have had, a sports or orthopedic injury like tendonitis, arthritis, stress fracture, or low back pain.** A specialist can help you develop a fitness routine that will promote wellness and minimize your risk of injury.