

## The Role of Hips in Treating Knee Pain

By: Danielle Keldermans, PT, DPT, AthletiCare™

In the fall season, outdoor activities usually increase. From exercising to yard work to playing with the kids, many people pick up the pace which can lead to aches and pains.

Knee pain is one of the main reasons athletes of all ages stop or reduce their physical activity. Some kinds of knee pain can be attributed to patellofemoral pain syndrome. This means the knee cap may be responsible for symptoms.

Approximately 2.5 million runners experience and seek treatment for knee pain each year. Females usually experience these symptoms more than men. Because knee pain may have several causes, it is important for your doctor and physical therapist to assess the movement and strength of the low back, hips and feet, in addition to the knee. Knee pain is usually not the result of a specific injury, but rather occurs over time or an increase in activity level.

An evaluation of how you perform certain movements such as running, climbing stairs and squatting are important so your physical therapist can determine the exact cause of the pain and develop an individualized treatment plan. For example, weak hip muscles can alter the way you do certain things. This places more pressure on the knee cap

resulting in symptoms such as aching with weight-bearing activities and stiffness after sitting for prolonged periods.

Treatments include taping, knee braces, strengthening the hip and knee muscles, improving the flexibility of the entire leg and different shoes, including orthotics.

Prevention also is important. Make sure you exercise regularly and include strengthening your quadriceps muscles (the ones that straighten the knee) and hip muscles. This helps maintain leg flexibility.

The addition of hip strengthening has been shown to reduce knee pain and enable a faster return to activity. These exercises help reduce the pressure on the knee cap and are less aggravating to the knee. Some hip exercises are more effective than others, so it's important to see your physical therapist to develop a customized program.

In summary, keep exercising and moving! This is the best way to prevent and manage knee pain caused by patellofemoral pain syndrome. The physical therapists at St. John's Hospital are dedicated and possess the skills and knowledge needed to help you manage your symptoms and maintain the high level of activity you desire.



Danielle Keldermans, PT, DPT

Danielle Keldermans graduated from Bradley University in May 2012 with a doctor of physical therapy degree. She joined St. John's Hospital in the outpatient physical therapy area in August of that same year.

Recently, Danielle began a post-professional graduate residency in orthopedic manual physical therapy. This is an 18-month program that prepares participants to become board certified in orthopedics.

On a personal note, Danielle enjoys cooking and spending time with her new husband and family.



# Bunion Deformities & the Athlete

By: Terese J. Laughlin, DPM, FACFAS

A bunion is a common foot condition which results in pain and discomfort in the great toe joint with activity. Altered alignment of the joint creates a bony prominence or “bump” on the side of the great toe. This bump may become red, painful and swollen, and often is irritated by shoe gear. In more advanced cases, arthritic changes cause pain with joint motion.

The cause the deformity is a complex biomechanical interaction of the foot’s bone, joint and soft tissue architecture. The condition is more common in women than men, and is also more common in adults. Bunions in children and adolescents tend to be much more severe than those of adult onset. To date, medical research has not shown how to prevent bunions. In both juvenile and adult varieties, the deformity will progress over time and generally cause damage to the joint cartilage.

The first line of treatment is shoe gear modification. Shoes with a wide and high toe box will accommodate the enlarged great toe joint and often eliminates pain in early deformities. This is especially true with athletes. Oral anti-inflammatory medication may also help control some of the discomfort, but you should consult with your physician prior to use. Functional orthoses may help control the biomechanical forces, which contribute to the bunion deformity, but they do not correct the problem. At best, orthoses may slow the progression of the deformity and delay the need for surgical intervention. Sport specific orthoses can be very useful for these patients.

Surgical correction is the only definitive way to correct a bunion deformity. Surgery reduces pain and improves function. Surgical procedures are quite variable, depending on the severity of the

deformity and the extent of cartilage damage.

Most bunions require a procedure which cuts and repositions the bones of the great toe joint, often using small metallic screws or pins to hold the bones in a corrected position. Although some cases may require cast immobilization following surgery, most procedures allow immediate weight bearing in a surgical shoe. Surgical intervention is generally indicated when the patient/athlete is significantly limited in their chosen activities because of the discomfort.

AthletiCare™ offers a comprehensive rehabilitation program for athletes undergoing bunion surgery allowing them to return to their sport quickly and safely.



Terese J. Laughlin, DPM, FACFAS

Dr. Terese Laughlin is a native of Downers Grove, Illinois. In high school, Dr. Laughlin excelled in track and cross-country, earning All-American honors and receiving an athletic scholarship to the University of Texas at Austin. In addition to being a four-year varsity letter winner and a member of a NCAA national cross country championship team at UT, she also received a bachelor’s degree in biology with honors.

Following her undergraduate studies, Dr. Laughlin attended the Dr. William M. Scholl College of Podiatric Medicine in Chicago, graduating summa cum laude and salutatorian of her class in 1994. She then completed a three-year podiatric medicine and surgery residency at the University of Texas Health Science Center at San Antonio, serving as chief resident of the podiatry service in 1996-97.

Dr. Laughlin and her husband, Dr. John Fleischli, moved to Central Illinois in 1997 to begin their private practice. Dr. Laughlin has published extensively on a variety of topics and has lectured at numerous medical seminars. She has a special interest in running-related injuries and foot surgery.



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The advertisement features a background image of a female athlete in a pink tank top and shorts, sitting on the grass and stretching her leg. The text is overlaid on the image. The logo for 'ACCELERATION 744-FAST' includes a stylized graphic of a running shoe or foot.



## Congratulations!

# Dr. Hillard-Sembell receives national award

Diane Hillard-Sembell, MD, was selected as the 2013 recipient of the Honorary Membership Award into the National Athletic Trainers Association (NATA). This recognition is given to individuals who have shown profound interest in and have made significant contributions to the profession of athletic training. Nominees cannot be athletic trainers and are required to have at least 15 years of involvement within the athletic training profession or association. Six letters of recommendation were submitted by athletic trainers and members of the community as part of the application process.

Dr. Hillard-Sembell accepted the award in July at the National Athletic Trainers Association symposium in Las Vegas, Nevada.



Kurt Turner, ATC

## Kurt Turner joins AthletiCare

Please welcome Kurt Turner, ATC, to St. John's AthletiCare and the Acceleration program.

The Acceleration program consists of 18 training sessions and a pre- and post-evaluation. The pre-evaluation is a series of tests to determine speed, agility and vertical jump. Athletes are instructed on proper running mechanics, linear and lateral speed, agility, quickness, lower body strength and power development. The athlete commits to training three times per week for approximately 60 to 90 minutes.

To maximize the program benefits, AthletiCare recommends athletes begin seven to eight weeks before their respective seasons. See example below.

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Mid-June	Football Cross Country Boys Soccer Volleyball
Mid-August through September	Boys Basketball Girls Basketball
Mid-October through November	Wrestling



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