



## Common causes of **foot pain** in runners: **Neuromas**

By: *John G. Fleischli, DPM, FACFAS*

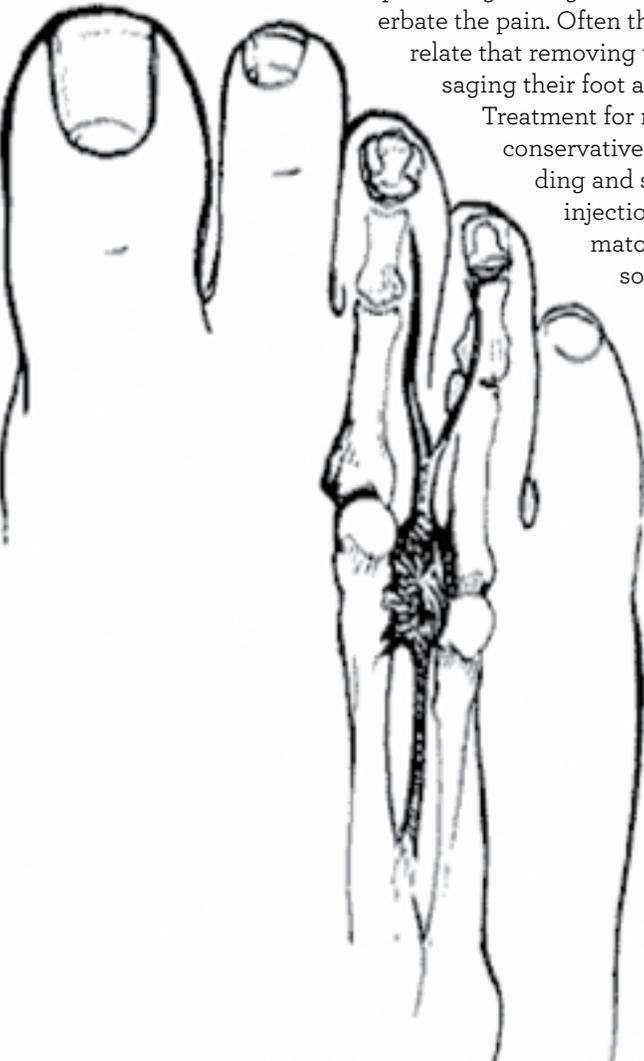
A burning sensation in the ball of the foot or tingling in the toes could be symptoms of a common foot condition known as a Morton's neuroma. Although generally a benign condition, a neuroma can be quite painful and cause extensive discomfort, especially during activities such as running.

A Morton's neuroma is an irritated, swollen nerve in the ball of the foot, most often between the base of the third and fourth toes, although there are other locations. The involved nerve is squeezed and irritated by the adjacent metatarsal heads, or "the knuckles" in the foot, causing the painful neuroma to develop. Chronic pressure on the nerve causes thickening and scarring. This creates a burning sensation and fullness in the ball of the foot, cramping or the sensation of walking on a pebble.

Activities such as running aggravate the neuroma because of the repetitive pressure on the forefoot and repetitive dorsiflexion of the toes during the push off phase of gait. High-heeled shoes also exacerbate the pain. Often those with a neuroma relate that removing their shoes and massaging their foot alleviates the pain.

Treatment for neuromas includes conservative measures such as padding and strapping of the foot, injection therapy, anti-inflammatory medication and sometimes orthotics.

Oftentimes changing shoe gear to a model with a wider and higher toe box will improve the symptoms. Icing the area after activity may also help. Although early diagnosis and treatment of the problem will increase the success of conservative care, surgical excision of the involved nerve mass often is necessary.



### MEET

#### John G. Fleischli, DPM, FACFAS

Dr. Fleischli was born and raised in Springfield. He attended Griffin High School where he was a two-sport letterman and honor student. At Illinois State University, Dr. Fleischli participated in football and was a member of the athletic directors role. After graduating with a degree in biology, Dr. Fleischli received his Doctor of Podiatric Medicine (DPM) degree from Dr. William M. Scholl College of Podiatric Medicine, Chicago, in 1994 and did a two-year surgical residency program at Midwestern Regional Medical Center in Zion, IL.

Dr. Fleischli's interest in research drew him to The University of Texas Health Science Center at San Antonio where he completed a Diabetic Foot Research Fellowship.

Dr. Fleischli has published extensively in the medical literature and lectures at medical conferences nationally. He has a strong interest in surgical treatment of foot deformities.

# Tennis elbow? But I don't play tennis!



## MEET Sarah Schroeder, OT

Sarah is an occupational therapist (OT) at the outpatient clinic at St. John's Rehab South. She treats a variety of conditions of the shoulder, elbow, wrist and hand. Sarah joined the AthletiCare/Rehab South team in August 2011 after obtaining her master's degree.

After being involved in athletics during her four years at Litchfield High School, she attended Illinois State University in Normal, IL, where she earned a bachelor's degree in exercise science. She also obtained personal training certification from the National Academy of Sports Medicine and began training fitness clients one-on-one with a special focus on women wanting to lose weight in a healthy manner.

Wanting to focus on rehabilitation of injuries, Sarah attended Saint Louis University and earned a master's of occupational therapy. She completed her level II fieldwork in Fox School District in Arnold, MO, and in orthopedics at ProRehab in St. Louis.

Sarah currently resides in Chatham and enjoys cooking, exercising, reading and spending time with her family.

## The ins and outs of elbow tendonitis

By: Sarah Schroeder, OT

It is that time of year where the temperature is warm, the sun is out and our bodies crave activity. With an increase in activity comes the potential for injury. Tendinitis of the elbow can be caused by a change in exercise routine or intensity, repetitive movement over time, poor conditioning of the elbow or as a result of compensation of another injury.

Tendons serve as the workhorses between muscle and bone. As the muscle contracts and pulls on the tendon, joint motion is produced. With overuse or misuse of these tendons, inflammation can occur, resulting in the pain and weakness associated with tendinitis.

Tendinitis of the elbow can be broken down into two types, depending on which side of the elbow the pain originates from. Tennis elbow (lateral epicondylitis) and golfer's elbow (medial epicondylitis) most often occurs between the ages of 35 - 55 years. This is due to changes in the structure of the tendons, making them more susceptible to injury.

The first sign of tennis elbow is pain centered around the lateral epicondyle (the bony projection on the outside of the elbow) that can radiate toward the wrist on the top of the forearm or lower part of the bicep, depending on the severity of the condition.

Golfer's elbow pain is centered around the medial epicondyle (the bony projection on the inside of the elbow) and can radiate down the palm side of the forearm or the lower part of the triceps.

Often, those with lateral and medial epicondylitis experience increased soreness in the evenings and increased elbow stiffness in the mornings. Gripping activities, especially with the elbow extended, will often increase symptoms.

While fitness and activity often contribute to these problems, those with occupations that require physical activity and repetitive movements are just as, if not more, likely to develop this condition as well.

A quick recovery is promising by keeping in tune to symptoms and seeking care early. Visiting an occupational or physical therapist on a routine basis under the direction of a physician can speed healing, along with a custom exercise routine. By adhering to the stretching and strengthening program designed by the therapist, the elbow can heal by learning to use the whole body properly, so the little muscles are not always doing the work for the big muscles. As the elbow heals, the body is able to get the activity it craves this time a year without the hindrance of injury.



# Injury prevention for the overhead athlete



Jen Shurtz, ATC

Athletes who participate in sports requiring repetitive activities with the hand above of the shoulder are considered "overhead athletes."

Overhead sports include, but are not limited to, volleyball, baseball, softball and swimming. Athletes who participate in overhead sports often suffer from overuse injuries of the shoulder and elbow. The recovery and rehabilitation process for these types of injuries can be long and involved and, in some

cases, may even require surgery. Thus, it is often said by athletic trainers that the best treatment for shoulder and elbow injuries is prevention.

One of the most important aspects of injury prevention is to keep in mind that everything in the body is connected. This is often referred to by sports medicine professionals as the kinetic chain. Because of this connection, a weakness or lack of flexibility in one area may have a negative impact on

tissue in another area. For example, weakness in the muscles surrounding the shoulder blade (scapula) may cause dysfunctional movement in the shoulder that places additional stress on a baseball pitcher's elbow. Over time, this may result in repetitive trauma and eventual ulnar collateral ligament (UCL) damage, requiring surgical reconstruction, commonly referred to as "Tommy John" surgery.

It is very important for the overhead athlete to have a maintenance program that addresses specific tissues that tend to be troublesome. This should include stretching of the shoulder's posterior capsule, pectoral muscles and wrist flexors; strengthening of scapular stabilizers (muscles around the shoulder blade), rotator cuff and core. The charts below are examples of a program appropriate for in-season maintenance.

Stretching should be completed daily and the strengthening portion of the program should be completed on non-game days three to five times a week.

For further information or diagrams of the exercises mentioned below, please contact Jen Shurtz MS, ATC, at [jennifer.shurtz@st-johns.org](mailto:jennifer.shurtz@st-johns.org).

	Name of Exercise/Stretch	Tissue(s) Involved
<b>Stretching</b> <i>3 sets, 30 seconds each</i>	Sleeper Stretch	Shoulder's Posterior Capsule (back side of shoulder)
	Door Frame Stretch	Pectoral Muscles
	Wrist Flexor Stretch	Flexor Carpi Radialis, Flexor Carpi Ulnaris, Palmaris Longus (wrist flexors)
<b>Strengthening</b> <i>3 sets, 10 per exercise</i>	Prone Horizontal Abduction w/ Thumb Up	Middle Trapezius
	Prone Horizontal Abduction w/ Thumb Down	Rhomboid
	Prone Lower Trap Raise	Lower Trapezius
	Side-Lying Shoulder External Rotation	Infraspinatus, Teres Minor (rotator cuff)
	Name of Exercise/Stretch	Optional Equipment
<b>Core Strengthening</b>	Plank on Elbows	Exercise Ball
	Plank on Hands	Exercise Ball
	Russian Twists	Medicine Ball

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