



THE UNIVERSITY OF TOLEDO MEDICAL CENTER

ORTHOPAEDIC MONTHLY

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6th Floor Unit Renovations Completed

There is a feeling of excitement around the UT Orthopaedic Center as the sixth floor orthopaedics and rehabilitation unit renovations are being completed. In 2007, the Orthopaedic Center opened and set the standard for excellence in outpatient orthopaedic services, and the sixth floor of the hospital will match that standard.

Like the Orthopaedic Center, the inpatient unit renovations are designed to make the sixth floor a pleasant and patient-centered atmosphere for patients and families. Included in the renovations are a family room, a conference room, and 30 rooms for patients, with a computer in every room. The newly remodeled family room will provide patients the opportunity to sit down and spend time with their loved ones. A conference room will provide a comfortable area for doctors to speak privately and educate patients and families. In all, there will be over 50 beds for the unit, which will be one of the largest orthopaedic/rehabilitation units in Toledo.

The new inpatient unit will help provide 24-hour coverage for patients. To achieve this goal, the unit will have a phone line connected to the Orthopaedic Center. For patients who want to be transferred or are coming from out of state with injuries or emergency situations, we'll accept the patient and facilitate the transfer. Once the

Orthopaedic Center closes at 7 p.m., a dedicated phone line will be staffed to assist in transferring the patient.

We believe this unit will help us do a better job in communicating and delivering information among different disciplines to reduce the length of stay. These disciplines include: cardiology; neurology; neurosurgery; trauma; pulmonary; nutrition; psychology; and other University clinical services.

In addition, many of the UT clinical services, including orthopaedics, will be available for our patients at any given time since doctor's offices are located in the hospital. This allows a truly unique patient-centered environment unparalleled in the area. Another unique advantage is having qualified doctors in house who will be able to care for patients at night.

As always, our goal is to improve the human condition and the patient experience. With the completion of the orthopaedics and rehabilitation sixth floor unit, we will have unmatched potential to ensure outstanding patient care. "The creation of the geriatric center and the 6th floor will enhance our ability to care for the elderly, the sick, and the injured patients," said Chairman and Professor of Orthopaedics, Dr. Nabil. ■



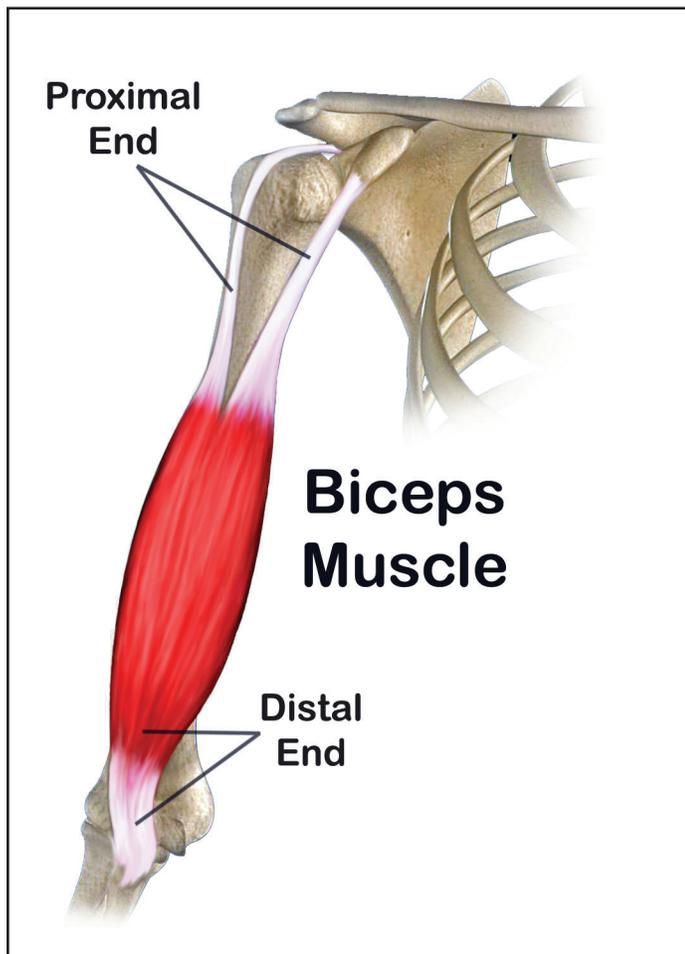
17-Year-Old Patient with Multiple Injuries Back to Playing Soccer and Daily Activities

At The University of Toledo Medical Center, our mission is to improve the human condition. At UT's Orthopaedic Center, we have the unique opportunity to help seriously injured patients return to the life they were previously enjoying.

On May 10, 2009, the Orthopaedic Center helped 17-year-old Corine Fonseca, who came to UTMC following a motor vehicle accident. She suffered a left humerus mid-shaft fracture; multiple pelvic fractures; a sacral fracture; full-

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Biceps Tendon



Before describing what the biceps tendon is and what it does, it is important to understand the anatomy surrounding the tendon.

The shoulder is a ball-and-socket joint comprised of three bones: the humerus (upper arm bone); the scapula (shoulder blade); and the clavicle (collarbone). The head (ball) of the humerus extends and settles in the glenoid socket of the shoulder blade. The rotator cuff, which stabilizes alignment, is a combination of muscles and tendons connecting the humerus and scapula.

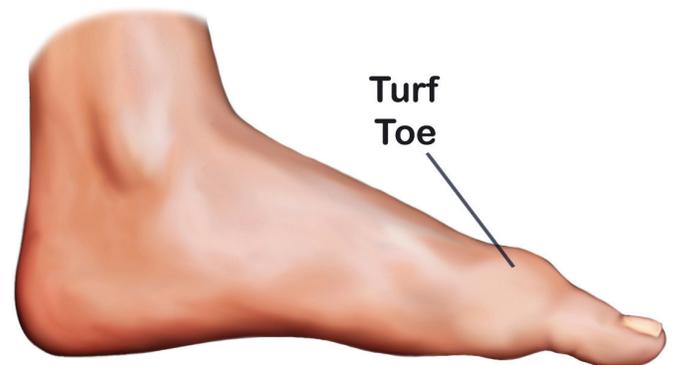
The biceps tendon is the tendon of the upper arm responsible for attaching bones of the shoulder and elbow. The biceps tendon acts as a head depressor at the shoulder and also acts as a supinator and flexor of the elbow. There are essentially two sections of the biceps tendon: the proximal and the distal. The proximal portion of the biceps tendon begins at the glenoid and exits the joint through the biceps groove, while the distal portion of the biceps muscle passes outside the joint to the coracoid process. The biceps tendon at the elbow is essential in helping the joint bend and rotate. At the shoulder joint, the biceps tendon helps stabilize the shoulder and is a bit more complex.

With the shoulder and elbow so active in daily activity, the biceps tendon is susceptible to several injuries. Common injuries include:

- Tendonitis
- Partial tears
- Ruptures
- SLAP tears
- Subluxation and dislocation
- Medial subluxation of the biceps could indicate a subscapularis tear

Biceps tendinitis is an overuse injury resulting from constant friction between surfaces. This constant friction causes inflammation of the tendon resulting in pain and soreness. Inflamed tissue with continued exposure to friction causes fraying or partial tears; this refers to separation of individual fibers. If the tendon is frayed or partially torn and continues to be exposed to friction, it may rupture. A rupture refers to a complete tear of the biceps tendon. If the tendon ruptures distally, it will need to be repaired surgically. If the tendon ruptures proximally, the tear will be managed conservatively, especially in the older or inactive population. Finally, a SLAP tear refers to a tear around the tendon attachment at the upper end of the glenoid. ■

What is Turf Toe?



With college and professional football season in full swing, one injury that gets a lot of press is turf toe. For instance, Notre Dame's prolific quarterback Jimmy Clausen has been seen battling turf toe since week four of the season.

Turf toe, technically referred to as a metatarsal phalangeal (MTP) joint sprain, is essentially a bruise at the base of the big (great) toe's joint caused by hyperdorsiflexion of the MTP joint. Turf toe can also be the result of the toe being forcibly and repetitively jammed into the ground.

Turf Toe *continued*

The great toe is made up of the first metatarsal (proximal) and the proximal phalanx (distal). In addition, collateral ligaments, plantar plates, sesamoid bones, flexor hallucis brevis, adductor hallucis, and abductor hallucis are anatomical components of the great toe.

Turf toe can be classified in three grades. Grade I turf toe is characterized by a stretching or a minor tear of the ligaments of the MTP joint. Grade II turf toe is characterized by a partial tear of the ligaments of the MTP joint without articular surface involvement. Grade III turf toe is characterized by a complete tear of the ligaments and joint capsule.

Patients with turf toe will likely present with the following symptoms:

- Pain
- Restricted movement
- Tenderness at the base of the toe
- Swelling at the base of the toe

Diagnosis for turf toe can usually be accomplished through a thorough history and physical examination. During physical examination, physicians will check for decreased range of motion, tenderness to palpation over the MTP joint, swelling, and ecchymosis. During range-of-motion testing, physicians will check for instability of the MTP joint by performing varus or valgus stress tests and drawer tests.

For most patients, turf toe can be treated conservatively with a combination of ice, anti-inflammatory medications, and alterations to footwear. Often, the toe is taped and devices such as steel plates are put on the inside of the shoe to protect the injured toe. Cortisone shots may be utilized to decrease inflammation and pain, but will only provide temporary relief. If conservative treatment fails, surgical intervention may be needed. Typically, surgery is only needed for turf toe patients when bone spurs develop or a ligament is torn completely.

This condition is referred to as turf toe because the injury commonly happens on artificial surfaces, so the injury is common for collegiate and professional football players. When an athlete stops when he/she is in motion, sometimes their cleats are caught gripping the artificial surface. When the body weight is transferred forward, the great toe is bent further than allowed. ■

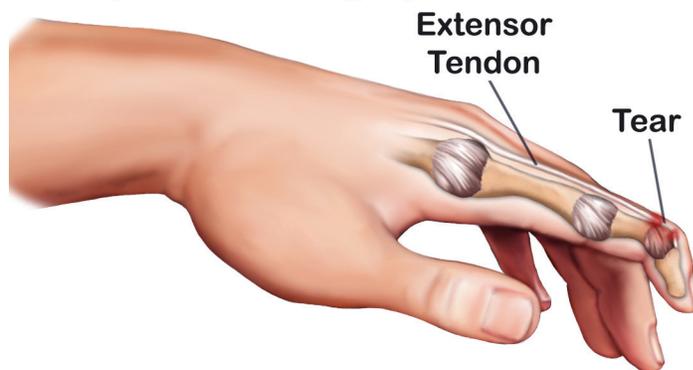
HAPPY HOLIDAYS TO EVERYONE
WORKING IN THE ORTHOPAEDIC
CENTER AND UNIVERSITY

Dr. Majid Gfraheim

CHAIRMAN AND PROFESSOR OF
ORTHOPAEDIC SURGERY

What is Mallet Finger?

Mallet Finger (Baseball Finger)



Mallet finger refers to a deformity of the finger caused by damage to the extensor tendon. Often an athletic injury, mallet finger is caused by forced flexion of the finger while it is held in an extended position. A common example is a baseball or basketball striking the tip of the finger while it is in extension.

Mallet finger typically presents in three ways:

- With damage to the tendon, but no fractures present
- With a tendon rupture and a small fracture present
- With a tendon rupture and a large fracture present

Patients with mallet finger will usually present with the following symptoms:

- Inability to completely extend the finger
- A fingertip that droops noticeably
- Pain
- Swelling
- Bruising

To diagnose mallet finger, doctors use a combination of history, physical examination and X-ray imaging. A thorough history and examination will likely shed light on the presence of mallet finger. X-ray imaging is used to identify fractures or malalignment. In addition, X-rays will also help identify foreign debris in the cut.

In most cases, mallet finger can be treated conservatively by a combination of ice and splinting. The goal for the splint is to hold the fingertip straight until it heals, usually, an eight-week process.

If conservative treatment fails or there is a fracture or extensive damage to the tendon, surgical intervention may be sought. If a fracture is present and more than 50 percent of the joint is subluxing, orthopaedic surgeons will correct the mallet deformity surgically. In addition, orthopaedic surgeons may need to repair the damaged tendon. Surgical approaches to repair the damaged tendon include tightening the stretched tendon, using tendon grafts, or fusing the joint straight. However, conservative treatment in the form of splinting is usually the preferred method of treatment. ■



17-Year-Old Patient *continued*

thickness facial lacerations; and facial fractures of both orbits, zygomatic arches and maxilla, as well as mandible fractures.

Due to the need for multiple facial surgeries, Ms. Fonseca was intubated and received a tracheostomy. The Orthopaedic team went to work to manage her left humerus mid-shaft fracture, as well as her pelvic fractures and sacral fracture. She underwent open reduction and internal fixation of the left humerus as well as external fixation of her pelvis.

Ms. Fonseca was admitted at UTMC for four weeks. Recently, she returned to the Orthopaedic Center for a routine follow-up. She was back to playing soccer and was in no pain. It was a unique opportunity to help Corine return to all the activities of a teenager, and with careful management and expertise, she has. ■

UTMC 497.1109

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Neither Dr. Ebraheim nor Dave Kubacki have any relationships with industry to disclose.

For medical questions you would like to see addressed in this newsletter, please e-mail Dave at david.kubacki@utoledo.edu.

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Congratulations Orthopaedic Department on opening the sixth floor inpatient unit!

A SPECIAL THANKS TO
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