



THE UNIVERSITY OF TOLEDO MEDICAL CENTER

ORTHOPAEDIC MONTHLY

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Orthopaedic Center Celebrates its One-Year Anniversary



The UT Orthopaedic Center

On October 15, 2008, The University of Toledo Orthopaedic Center celebrated its one-year anniversary. The Orthopaedic Center has evolved into the premier destination for orthopaedic care in Ohio. Through a process of continuous improvement and a focus on delivering patient-centered care, a new standard of health care has been set.

The opening of the Orthopaedic Center has ushered in a new style of patient care focusing on access, service and convenience. The unparalleled access to appointments with an orthopaedic specialist includes appointments within 24 hours of calling the Center; emergencies will be seen immediately. In the last year the Orthopaedic Center also began holding clinics on Saturdays to allow patients who may not be able to come during the week easy access to orthopaedic care.

The Orthopaedic Center has 11 orthopaedic surgeons on staff ready to treat injuries from neck to toe and every bone and joint in between. This past year the Center added pain management services, EMG and nerve studies, DEXA scanning, MRI imaging, infectious disease and rehabilitation.

In addition to these services, Orthopaedic Center patients benefit from having all services in one convenient location. Services include: free valet parking; a complimentary coffee and snack bar; in-house registration; appointment rooms; a procedure room; an urgent care room; soft good and cast rooms and the most advanced radiological technology including digital x-ray, DEXA and MRI imaging. The Center is also equipped with a laboratory, a patient education center and financial counseling.

At the UT's Orthopaedic Center, patients are guided through each step of their visit by a hostess. Although all services are housed under one roof, there are Team Ortho members ready to guide you through the process from the moment you walk through the door until the moment you leave. They are prepared to answer all of your questions.

Orthopaedic Center patients also benefit from having access to The University of Toledo Medical Center (UTMC) if needed. UTMC is a Level 1 Trauma Center that is equipped to handle the most serious types of injuries. If a consultation with a specialist is needed, the Orthopaedic Center can provide that as well. Specialists from cardiology, neurology, nephrology, trauma, pulmonary medicine, and vascular surgery are all available for patients of the Center. Most of these consults can be obtained on the same day.

We welcome ideas and suggestions to make our services better, as the Orthopaedic Center was created for patients and for the community. It is the goal of UT's Orthopaedic Center to be the ideal local, national and international destination for orthopaedic care.

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Injuries in the Workplace



Talus Fracture

Ankle Pain

The ankle is a hinged joint formed by three bones: the tibia (shin bone), the fibula and the talus. As a hinge joint, the ankle is capable of moving in two directions: toward the body (dorsiflexion) and away from the body (plantar flexion). The tibia forms the inner portion of the ankle, while the end of the fibula forms the outer portion of the ankle. The hard bones on each side of the ankle are called the malleoli which, with the help of ligaments, provide stability to the ankle joint. Functioning in its normal capacity, the ankle has the ability to move the foot from its right-angle position to approximately 45 degrees of plantar flexion and to approximately 20 degrees of dorsiflexion.

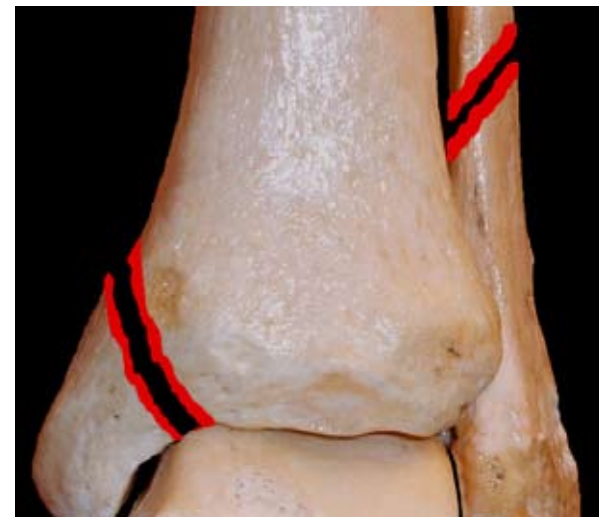
Ankle pain is commonly caused by several different injuries and conditions, including ankle sprains, ankle fractures, tendinitis, arthritis and tarsal tunnel syndrome.

The most common cause of ankle pain is sprains. Ankle sprains describe a partial or complete tear of an ankle ligament. These injuries typically occur when the ankle is suddenly twisted or thrown out of its natural position. Ligamentous injuries are usually graded from I to III ranging from partial to complete tears. Partial tears retain some ankle stability, while complete tears lose stability. Ankle sprains are initially treated with ice and rest, while anti-inflammatory medications can be given to reduce inflammation and pain. For severe sprains, casts may be used to immobilize the ankle. In the case of grade III injuries, surgical repair may be needed.

Ankle pain may also be the result of a fracture. Fractures of the ankle joint can occur in the fibula bone alone or may also be a bimalleolar or trimalleolar fracture. It's important to look for syndesmotic injuries in the case of ankle fractures. Syndesmotic injuries require surgical stabilization. Maisonneuve fractures, which refer to a fractured fibula

and an associated ankle injury, are sometimes missed. Since they are more difficult to identify, it's necessary to get a full leg x-ray including the knee and ankle. Talar fractures are also prevalent ankle injuries. They are best evaluated by CT scan and carry a high risk for avascular necrosis (death of bone tissue due to a lack of blood supply). Surgery is needed for displaced talar neck fractures. Reduction and stabilization is needed for fractures of the talar body associated with the dislocation. Finally, fractures of the calcaneus are additional ankle fractures. For patients with a calcaneus fracture, it is important to look for lumbar spine fractures or other fractures of the lower extremities which may be missed. Treatment for non-displaced extra- and intra-articular calcaneus fractures includes a short period of immobilization, physical therapy and range of motion exercises. For displaced extra and intra-articular fractures and open fractures, surgery is needed.

A third common cause for ankle pain is tendinitis. Tendinitis refers to an inflammation of ankle tendons which may involve the Achilles tendon, the posterior tibial tendon or the peroneal tendon. While tendonitis is usually the result of trauma, it can also be caused by inflammatory diseases such as rheumatoid arthritis and ankylosing spondylitis. Treatment for tendinitis includes immobilizing the area, limiting weight bearing, applying ice, and using anti-inflammatory medications. However, more serious inflammation may require casting or surgery.



Bimalleolar Fracture

Other conditions that may cause ankle pain include arthritis of the ankle joint and tarsal tunnel syndrome. Arthritis refers to inflammation of the ankle area. This type of injury is usually the result of a gradual developing problem. Tarsal tunnel syndrome is the result of a nerve compression at the ankle as the nerve passes under the normal supportive band of the ankle. This supportive band is called the flexor retinaculum.



Upper extremity injuries include the neck, shoulder and elbow

Roughly 6.3 million people are injured in the workplace every year. They range from injuries to the upper extremities, to the lower back, and to the lower extremities. Some workplace injuries are traumatic while others develop over a period of time.

According to the Bureau of Workers' Compensation, direct costs for upper extremity injuries amounts to \$2 billion (plus an additional \$90 million in indirect cost). Injuries to the upper extremities arise several different ways and affect several different body parts including the neck, shoulder, elbow, hand, wrist and fingers. Of these, workers whose jobs require repetitive forceful movement throughout their work shift suffer the highest rate of injury. Typical jobs with repetitive forceful motion include automobile and electronic assemblers, office data entry workers, cashiers and food processors. The National Institute of Occupational Safety and Health conducted a study and determined that posture, repetition and force were significant risk factors in developing workplace injuries.

The most common work-related injury to the upper extremity is carpal tunnel syndrome. Affecting nearly 8 million Americans, carpal tunnel syndrome is a condition in which the median nerve is compressed at the wrist, leading to pain, muscle weakness and numbness in the hand. Workers whose jobs demand repetitive movement of the wrist, hand and arm are at a high risk for developing carpal tunnel syndrome. Other common injuries associated with the hand and wrist include tendinitis, trigger finger and Raynaud's syndrome. Upper extremity

injuries also include the neck, shoulder and elbow. Common injuries for these areas include rotator cuff tendinitis, shoulder impingement, thoracic outlet syndrome, epicondylitis, and tension-neck syndrome.

Lower back pain is also an area susceptible to injuries at the workplace. According to the Occupational Safety and Health Administration, 1 million workers every year are affected by back pain, second only to the common cold for missed days of work. The resulting health-care cost for these injuries is roughly \$50-100 billion each year, with roughly \$11 billion of these costs covered by Workers' Compensation. Low back pain is the third-most common reason for surgery and the fifth-most common reason for hospitalization. According to Workers' Compensation, the average claim is \$8,300, which is more than twice the average cost of all other types of claims combined. Risk factors associated with lower-back injuries are activities that require lifting and forceful movements, and jobs that expose workers to whole body vibration. To decrease the likeliness of low back pain, it is important for workers to learn proper lifting techniques, stretch, reduce the size of objects being moved, adjust the height at which objects are moved, and implement mechanical aids. Typical back injuries include strains, sprains and herniated discs. According to the National Safety Council, 25 percent of workplace injuries are caused by overexertion, which is listed as the cause for 60 percent of all low-back injuries reported. Physical therapy, pain control and rest are typical conservative treatments used. The most important principle for low back pain treatment is advice and explanation to the patient. Fortunately, only 5-10 percent of patients with low back pain require surgery. Usually there is a 90-95 percent success rate for a properly selected patient.

Lower extremity injuries can also arise in the workplace. Here, sprains, strains and tears to the ligaments, tendons and muscles supporting the lower extremities are common. They are usually caused by improper lifting, squatting, twisting, falling objects or a loss of balance. Like injuries to the wrist and hand, lower extremity injuries can also be the result of overuse. Inflammation of the muscle or connective tissue is a typical concern with overuse of the lower extremities. Common conditions associated with lower extremity workplace injuries include tendinitis, bursitis, tenosynovitis, torn meniscus, stress fractures or damaged cartilage. They are usually caused by poorly designed work areas, poor physical condition, poor posture, lack of exercise, excessive body weight and excessive physical demand.



Dear Dr. Ebraheim, Greg, Jared and Ortho Team,

I would like to thank you for the great health services that you have provided. It has been more than 40 years since my last surgery as a child. After my knee replacement last year, with tears in her eyes, my mother said it was the very first time she has seen me walk straight since I was three years old when the knee problem started.



Linda Boyer and Jerry Lucas, former Professional Basketball Player

The photo is of me as the Easter Seal Child for Ohio in 1965 with basketball player Jerry Lucas. This was taken after my second surgery at 6 years old. Since then, I have been able to enjoy life the best that I could, even marching in my high school band.

Now, with my new knee, I can have many more years of enjoyment doing things with my grandchildren and continuing my hobbies and interests.

With many great thanks from me and my family,

Linda Boyer

November 2008

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

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