

Pain in the Big Toe Joint

Many common disorders such as arthritis, accidents, bunions and sesamoiditis can cause pain in the big toe joint. The pain can make work and everyday activities, such as walking, more difficult. The big toe is joined to the foot at the first metatarsophalangeal (MTP) joint, the one that allows the toe to move upward and downward. This joint is important for efficient push off during walking and running and mobility at this joint is necessary for many work-related motions, activities of daily living and sporting activities.

Pain and swelling around the big toe joint can limit movement and impair a person's ability to stay active or simply perform tasks of daily living. In this blog we look at some of the causes of pain at the big toe joint and how to treat them.

Causes

Pain in the big toe joint can be caused by a variety of factors, including:

- Injury to the big toe
- Bunion
- Sesamoiditis
- Osteoarthritis
- Gout

Injury to the Big Toe

The big toe joint can be injured in a variety of ways. Trauma from stubbing the toe or dropping something on the joint can lead to long term problems. Overuse can result in a stress fracture, which is a small crack in the bone caused by repetitive force. Another common cause of toe pain is sprains. When the ligaments in the toe become torn or stretched, this results in a sprain.

Turf toe, a common sport injury caused by excessive or repetitive pressure on a bent toe, may be the cause in some cases. The big toe joint suffers from pain and swelling because of these injuries. Some traumatic injuries to the big toe joint will resolve on their own but if there is still pain after more than a week then an assessment with your Dr. should be scheduled. Physiotherapy, footwear changes and foot orthotics can all be helpful with injuries.

Bunion

A bunion is a bony lump that forms on the inside of the first MTP joint. It can cause pain and swelling at the MTP joint of the big toe and sometimes into the toe. It can also cause stiffness and limited flexibility.

The big toe may begin to turn toward the second toe, which is known as a hallux valgus deformity. This problem makes footwear fitting very difficult and can cause pain while walking or performing any activity.

Bunions can affect anyone, although they are more common in people who have a family history of bunions. They are certainly exacerbated by tight fitting or poorly fitting footwear. Treatment for bunions includes footwear changes, physiotherapy, foot orthotics, supportive devices such as toe separators and bunion guards.

Sesamoiditis

In the foot, the sesamoid bones are located beneath the first MTP joint. They are two small bones that are encapsulated by tendons that attach to the toe. Overuse of the toe causes inflammation in the sesamoid bones and associated tendons, which is known as sesamoiditis. Pain under the first MTP joint can be caused by sesamoiditis and may lead to pain, swelling, bruising, and trouble bearing weight on the sesamoids or pain when moving the toe. Treatments for sesamoiditis include accommodating the painful sesamoids using custom foot orthotics, physiotherapy to reduce swelling and improve pain levels, deeper footwear, activity modifications.

Osteoarthritis

The MTP joint of the big toe is the most common site of osteoarthritis in the foot. Osteoarthritis is a type of arthritis that develops because of wear and tear at the joint. Arthritis in the toe can produce discomfort, achiness, and joint pain even in the early stages. As the pain continues you may make unconscious changes to the way you walk in order to avoid the first MTP. These compensations can lead to pain elsewhere in the foot and in other joints and muscles of the legs. You may also develop a bump on the top of the joint and limited motions of the first MTP. Treatments include physiotherapy, foot orthotics, medications for pain reduction.

Gout

Gout is an accumulation of uric acid crystals in the joint. Uric acid is a waste product that passes through the bloodstream before being excreted in urine by the kidneys. Uric acid crystallization and the creation of tiny deposits are possible side effects of high uric acid levels. It can be excruciatingly painful when this happens in the joints. Signs of gout in the first MTP include swelling, heat, redness, extreme pain with motion or pressure. Treatments include medication, activity modification, footwear changes.

To confirm or determine the exact diagnosis of your toe pain, please visit your family physician.

Pedorthic Treatment and relief

If you are experiencing pain in the first MTP joint, see your Dr. Your doctor may recommend a consult with a Canadian Certified Pedorthist to see what conservative treatments are available for your pain. A pedorthist will perform a biomechanical assessment of your feet and lower limbs,

assess your current footwear and determine if pedorthic treatment would be of benefit for your specific problem. Pedorthic treatment includes:

- Foot and lower limb exam
- Custom-made foot orthotic or over-the-counter insoles
- Modification of footwear
- Recommendation of appropriate and proper fitting footwear
- Toe spacers or padding