

ARTHRITIS

Arthritis is a very common disease which can affect the joints, skin and various internal organs. In many cases, arthritis causes pain, stiffness and sometimes swelling in or around joints, and can destroy the joint surfaces affecting their mobility. Because the effects of arthritis often spread to or from the feet, Canadian Certified Pedorthists can help patients retain and enhance mobility.

The two most common presentations in the foot are inflammatory arthritis, for example rheumatoid arthritis or gout, often marked by episodes of stiffness, heat, redness and/or swelling, and degenerative arthritis, for example osteoarthritis, an age-related wear and tear of the cartilage which worsens gradually over time. Some of the most common types of arthritis are:

OSTEOARTHRITIS

Symptoms

Common locations of degenerative arthritis are the 1st metatarsal phalangeal (MTP) joint, talo-cruial joint and subtalar joint resulting in:

- Tenderness along the joint line
- Reduced range of motion
- Crepitus, pain in weight-bearing
- Formation of osteophyte

What is it?

Osteoarthritis (OA) is a degenerative joint disease, and is one of the most common types of arthritis. For many people, osteoarthritis pain and inflammation cannot be avoided as the body ages. In fact, many people over the age of 50 years old show some signs of wear and tear arthritis as joints naturally degenerate over time. OA is characterized by the breakdown of the joint's cartilage, causing the bones in the joint to rub together. The result is inflammation, redness, swelling and pain in the joint. A traumatic injury such as a broken bone, torn ligament or a moderate sprain can sometimes cause an injured joint to become arthritic in the future.

(Osteoarthritis) Pedorthic Treatment

With a prescribing physician's recommendation, Canadian Certified Pedorthists may use over-the-counter devices or may create custom-made orthoses to help address mechanical deficiencies, limit excessive motion and accommodate painful areas of the foot by providing full contact cushioned orthoses. To further restrict joint dorsiflexion, a morton's extension or a hallux rigidus splint for 1st MTP joint OA may also be incorporated. Canadian Certified Pedorthists can also accommodate bone spurs/osteophytes within the orthoses or by modifying footwear for increased comfort. The goal of pedorthic treatment is to lessen any abnormal or increased movement between joints in the foot which may aggravate the pain and tenderness caused by osteoarthritic changes to a joint.

RHEUMATOID ARTHRITIS

Symptoms

- Foot pain, swelling and stiffness
- Symptoms usually appear in the toes or forefoot first, followed by the midfoot and then usually the ankles
- If the midfoot is affected, the bones may shift position causing the medial longitudinal arch of the foot to collapse, resulting in pain and difficulty walking
- Prominent, painful metatarsal heads and hammer toes
- Rheumatoid nodules commonly seen beneath the skin as bumps over a bony prominence such as the metatarsal heads (ball of the foot)

What is it?

Rheumatoid arthritis (RA) is the most common form of inflammatory arthritis. It is a condition caused by an irritation of the lining of the joint known as the synovium, or synovial lining. Rheumatoid arthritis is a systemic disease that attacks multiple joints throughout the body. In RA, cells of the immune system within the synovium attack surrounding tissue and can cause inflammation within the joint. If the inflammation persists, nearby cartilage, bone, tendons and ligaments can be damaged and lead to deformity of the joint. People with rheumatoid arthritis often have rheumatoid nodules and misaligned joints in the toes making shoe fitting difficult.

(Rheumatoid Arthritis) Pedorthic Treatment

With a prescribing physician's recommendation, Canadian Certified Pedorthists may use over-the-counter devices or may create custom-made orthosis featuring metatarsal pads or bars to off-load painful metatarsal heads with additional accommodations to off-load rheumatoid nodules. The goal of Pedorthic treatment is to stabilize the heel, to limit excessive motion which can aggravate inflamed joints, and accommodate painful areas and joints of the foot by providing full-contact cushioned orthoses. Shoes are a key treatment area for the foot affected by RA as an appropriately fitted shoe can help alleviate the pain.

GOUT

Symptoms

- Sudden onset of severe pain, tenderness, redness, warmth and swelling in the affected joint
- Commonly seen in the big toe, but can occur in other joints as well
- Usually affects one joint at a time
- People with gout will often report that they cannot tolerate anything touching the affected area and, if gout affects the feet, patients may be unable to weight-bear

What is it?

Gout is characterized by sudden, severe attacks of pain and tenderness, redness, warmth, and swelling in joints. It is caused by a build up of uric acids which forms crystals that deposit in joints. As the body tries to remove the crystals, painful inflammation occurs. It commonly affects men over 40 years old, but can affect anyone of any age. Women with gout usually develop it after menopause. Gout pain seems to be very unique and once experienced is often not mistaken again for any other condition.

(Gout) Pedorthic Treatment

The goal for treatment is to control the pain of inflammation by decreasing the irritation to the joint, allowing the joint to work as normally as possible. With a prescribing physician's recommendation, Canadian Certified Pedorthists may use over-the-counter devices or may create custom-made orthoses to stabilize the heel to limit excessive motion, particularly excessive pronation which can result in increased pressure over the medial aspect of the 1st MTP joint. There may also be accommodation to an orthosis or shoe to offload the 1st MTP joint and to provide some pain relief. Accommodation and modification of footwear to relieve pressure over the affected joint can also provide increased comfort.

PEDORTHIC POINTERS FOR PATIENTS

To alleviate the pain caused by arthritis, Canadian Certified Pedorthists recommend selecting footwear featuring:

- Rigid rocker soles to decrease stress on the ball of the foot and provide a more efficient push-off
- Soft leather uppers or materials that will mold around deformities or sensitive areas
- Wide, deep, square toe-boxes with no seams over hammer toes or other sensitive areas to avoid pressure on painful joints
- Velcro closures or elastic laces to eliminate the need to lace up a shoe, if fine dexterity in the fingers is difficult
- Heels should be lower than 1" or 2.5 cm - avoidance of high heels is recommended