



What is it?

The Arthritis Society defines rheumatoid arthritis (RA) as “a systematic inflammatory disease that can affect multiple joints in the body.” While the true origin of RA remains unknown, it is believed to result from a malfunctioning immune system. It has been suggested that the joints of the foot are affected in approximately 16% of patients with early RA and may rise as high as 90% with progression of the disease.

What do people experience?

Symptoms may be isolated to one joint or spread to many joints and can include:

- Pain
- Swelling
- Redness or warmth to the touch
- Joint damage or deformity
- Difficulty walking or performing activities of daily living
- ‘Flare-ups’ or periods of heightened symptoms are common

Risk factors

Risk factors for discomfort include:

- Poor fitting or worn out footwear
- High impact exercise
- High volume or intensity of exercise during periods of heightened symptoms
- High weight or obesity may increase the pressure placed on your feet and force transmitted through your joints
- Life stress and worry (anxiety) have been shown to worsen symptoms (arthritis.org)

Make sure to use:

- Good relaxation and coping strategies
- Assistive devices such as canes, walkers, reach-and-grab type devices
- Conducive environment – limit elevation changes and stairs, soft surface floors (carpet instead of ceramic or hardwood)

What can you do to feel better today?

- It is important to stay active with RA. Mild to moderate intensity, low impact exercise is commonly recommended to preserve joint function. During times when your joints are swollen and hot, low impact and light range of motion exercises are more appropriate. Always consult with the appropriate health care professional before starting a new exercise program.
- Cushioned footwear and foot orthotics have been shown to help reduce foot pain scores. Reducing impact forces and distributing pressure evenly across the bottom of the foot can work to reduce areas of high pressure.
- Use heat and cold therapy. Using a warming pack or taking a warm shower may help reduce joint stiffness or pain. Never apply heat to an inflamed or swollen joint. Likewise, using a cold pack or ice bag may be helpful during periods of swelling or pain. Always use a barrier, such as a towel, between the skin and the hot/cold pack.
- Healthy eating and weight control are also important factors in day-to-day health when living with RA. Consult a dietician or your family physician for more information.

What are my options for treatment? Who can help?

There are a number of treatment options available to those living with RA. Options range from medication and lifestyle modification to footwear prescription and pressure offloading. Your family physician or rheumatologist will be more than happy to discuss appropriate medications and life style alterations.

Exercise prescription and pain management can be discussed with physiotherapists, kinesiologists, pedorthists and other health care professionals. Occupational therapists can help with lifestyle and household modifications to assist with activities of daily living.

Pedorthists are rigorously trained in the assessment and treatment of various types of arthritis, including RA. Through footwear prescription and modification, custom or off-the-shelf foot orthoses, basic range of motion exercises and stretches, life style modifications, and various other modalities, your pedorthist can help with concerns relating to the foot and lower extremity.

Prevention/Prehabilitation

Currently, there is little known about the prevention of RA. There are however, a number of measures that can be taken to limit flare-ups and to manage your symptoms.

- Exercise and diet play a large role in the maintenance of joint and muscle function.
 - Take care to select an appropriate exercise routine. Level of intensity is important and should take into consideration factors such as current level of fitness, age, current level of joint and muscle function, comfort etc.
 - Diet is based on a number of factors and should be managed with the assistance of a registered dietician or physician.
- Maintaining a health body weight is important. Being overweight or obese may increase both the pressure on the bottom surface of your foot and the force transmitted through your joints.
- Footwear selection is important to consider. Proper fitting shoes are vital in the prevention of foot pain. Width, length, depth, level of support, and cushion are all factors to consider. Consult your pedorthist for more information.
- Foot orthotics can play a pivotal role in the prevention of foot discomfort. With appropriate support and cushion for the arches of your feet, research has shown custom foot orthoses are effective at limiting the occurrence and reducing the severity of foot pain.

- Modifying or limiting activities that cause discomfort can be an effective way to reduce symptoms. Riding a bike or roller blading instead of running, swimming instead of high impact exercise, and using assistive devices can limit discomfort and optimize ability.

Staying active with pain

Day-to-day discomfort can be managed, and in many cases improved, with moderate intensity and low impact exercise. During times of heightened symptoms or flares, low intensity range of motion exercises may help preserve joint function and improve comfort. High impact and high intensity exercise should be avoided at times when your joints are painful, hot to touch, or swollen. An appropriate warm up and cool down should always be performed before and after exercise to ensure optimal muscle function. If you are new to exercise or have questions regarding appropriate exercise selection, consult with your kinesiologist or physiotherapist.

Appropriate footwear with adequate support and cushion is important during periods of exercise. Consult with your pedorthist regarding footwear that is appropriate for your foot type and selected activities.

FEEL BETTER, DAY TO DAY. HELP YOUR RA FLARE UPS WITH PROPER FOOT CARE.

To feel better, read on!

How can SoleScience help you feel better?

Your SoleScience Pedorthist will create an individualized treatment plan that suits your specific needs, goals, and symptoms. We will work with you to determine not only what we need to do to address your current concerns, but also to prevent future problems.

Your pedorthist will complete a thorough and comprehensive foot examination at your initial appointment. A comprehensive follow-up exam will ensure that you are meeting your goals and allow your pedorthist to reassess your treatment plan (as necessary). During these appointments we will:

- Assess joint and muscle function, including range of motion and gait assessment

- Assess your footwear for both fit and function
- Identify any risk factors that can be modified and make recommendations for change
- Identify areas of risk with specialized tools such as pressure mapping (F-Scan or Pedograph)
- Discuss a treatment plan, which may include a change in footwear, activity modification, or custom foot orthoses and/or a complementary treatment referral (such as physiotherapy)

In addition to your individual treatment plan, your SoleScience Pedorthist will provide you with educational resources to help you best maintain your foot health.

Our take on the need for custom foot orthoses

Custom foot orthoses are appropriate for a variety of conditions, and RA is no exception! With support found in the current medical literature, custom foot orthoses can be greatly beneficial to those experiencing RA related foot pain. By evenly distributing pressure and cushioning the entire bottom surface of the foot, custom foot orthoses are extremely effective at reducing painful areas of high pressure. Similarly, foot orthoses can be used to reduce or control motions of the foot that may be contributing to your discomfort.

Custom vs. OTS

OTS, off-the-shelf orthotics, are pre-fabricated devices that can be fit in to your shoes right from the shelf. This type of orthotic is typically heat moldable, allowing for a degree of immediate customization. Truly custom-made foot orthoses are differentiated in that they are designed specifically around a 3D model of your foot. This type of orthotic can be completely tailored to suit your needs. Depending on your symptoms, OTS devices may be appropriate in the early stages of RA, whereas in more advanced cases, custom made orthotics may provide the most comfort and relief of symptoms.

Footwear recommendations

Appropriate footwear selection is important for day-to-day comfort and depends on your specific mechanics. Generally speaking, footwear with ample cushion and support work well while managing RA symptoms. No matter which shoe you select, proper fit is vital. Length, width, depth, and heel height are important considerations to make. Consult with your pedorthist for recommendations specific to your foot type and intended use.