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## Advice to People With Arthritis

### What is Arthritis?

Degenerative or osteoarthritis is a condition that slowly wears away joints (the link where bones meet and move). The covering of the bone is made of a special type of cartilage called hyaline cartilage which is clear and glistening. As this cartilage wears down, the bones rub against each other resulting in pain, stiffness, swelling, and loss of joint motion. Over time, arthritis can be seen on x-ray. These changes include small pieces of rough or splintered bone called bone spurs that are located on either side of the joint. The joint space may also be narrowed. Arthritis is most likely to develop at the site of an old injury or in joints that are not in proper alignment.

### How Do I Know If I Have Arthritis?

As mentioned previously, pain and stiffness of more than 5-10 minutes or swelling are signs of arthritis. X-rays of the foot will show bony changes if the arthritis has been present for more than a few months. Upon physical examination of your foot, I can sometimes feel the bones rubbing against each other, indicating a loss of joint cartilage. Once the hyaline cartilage is lost, it is not replaced. A different type of cartilage called fibrocartilage may replace it if the joint continues to move.

### Where Are Some Joints in the Foot Where Arthritis Can Develop?

**1. The Big Toe Joint:** When arthritis affects your big toe, your foot hurts when it pushes off the ground. Arthritis often appears in the big toe joint with a bunion (a bony bump at the side of the joint) or a bony bump on the top of the joint. This bump looks like a shark fin on x-ray. If it becomes large enough, the joint may lock up and not be able to move. In this case, walking becomes very painful.

**2. The Joint of the Smaller Toes:** Arthritis affects the smaller toes in the case of hammertoes. When the joint becomes rigid, padding, medications, or surgery are usually necessary.

**3. The Metatarsophalangeal Joints:** These are the joints at the base of the toes. A person with one metatarsal bone lower than the other may be at risk for developing arthritis in these areas. Also, a person with a high arched foot puts more stress on these bones because the weightbearing areas in this foot are the heel and the metatarsal heads.

**4. The Joints at the Top of the Arch on the Top of the Foot:** These joints can develop arthritis as a result of twisting injuries of the foot. If they are out of alignment, arthritis will develop because the joint is wearing unevenly. It is like a car with the front end out of alignment: the tires wear unevenly!

**5. The Subtalar Joints:** These are the major joints in the foot that are just below the ankle joint. A person with severe flat foot will be prone to develop arthritis in this area because the joints are out of alignment when the foot pushes off the ground.

**6. The Ankle Joint:** A person with a high arched foot will be more prone to ankle sprains. If you continually sprain your ankle, this could lead to arthritis in the ankle. Sometimes, some of the joint cartilage (the lining of the joint) may tear off and turn to bone. This will result in pieces of bone in the joint.

### **How is Arthritis Treated?**

**1. Medications:** Oral medications used to treat arthritis include NSAID's (Non-steroidal anti-inflammatory drugs): Motrin, Alleve, Ansaed, Relafen, Feldene, Daypro, Orudis, Celebrex, and Bextra to name just a few. The main side effect of these medications is stomach irritation. Other medications include oral and injectable steroids. These drugs are stronger than the anti-inflammatories, and may give quicker relief. Along with the medications, heat helps to keep the joint moving, but cold at the end of the day helps to relieve pain.

**2. Restoration of Joint Alignment:** In the case of a severe flat foot or high arched foot, restoration of normal joint motion by the use of orthotics is necessary. Orthotics help to restore normal motion in the foot by maintaining the subtalar joints (the main joints in the foot just below the ankle) in the socket so they do not wear unevenly.

**3. Loss of Weight:** If you are overweight, losing weight will help improve the condition. When you walk, you have one and a half times your body weight on your feet. So, losing one pound is like losing 1.5 pounds of pressure on your feet.

**4. Natural anti-inflammatory agents:** Quince, strawberry leaf, chamomile, Jacob's ladder, and abscess root are some examples. Glucosamine sulfate and chondroitin sulfate are used in many over-the-counter preparations-I have used this and found it to be helpful.

**5. Surgery:** To ease movement and reduce pain in more severe cases of arthritis, I will shave away bone spurs. Any bony growth related to a bunion should be removed. If the damage to the joint is more severe, fusion of the joint using staples or screws to hold the bones in place may be necessary.