



## **Bunions**

Bunions, also known as hallux abductovalgus, are a bone deformity located at the first metatarsophalangeal joint characterized by bone growth near the base of the big toe.

During this process, the big toe slightly rotates and moves towards the second toe.

Bunions can lead to pain at the first metatarsophalangeal joint as well as reduce the range of motion at the joint, most notably extension of the big toe. This range of motion reduction can lead to the big toe becoming stiff, which can be problematic during gait or athletic activities.

## **Causes & Symptoms:**

Bunions are more commonly seen in women compared to men. For adults, this discrepancy is thought to be partly due to the narrowness of women's shoes in comparison to men's. Narrow shoes squeeze the big toe into the lesser toes, which affects the integrity of the joint. Bunions in children are primarily caused by hereditary factors including flat feet, loose joints and tendons, and metatarsus adductus all increasing the risk. Certain sports equipment like hockey or figure skates, dancing shoes, and cleats can also increase the risk of developing bunions. These types of footwear have a tendency to fit narrow, which can rub and irritate the area of the big toe joint causing potential bunion growth. In sports like dancing and soccer, there is a lot of repeated stress to the first metatarsophalangeal joint, which can also contribute to bunion growth.

## **Treatment:**

Pedorthic treatment includes custom foot orthotics, splints and spacers, and orthopedic footwear recommendations.

For children suffering from over pronation, custom foot orthotics help alleviate the excessive pressure over pronation causes to the first metatarsophalangeal joint. If there is a reduction in the range of motion to the first metatarsophalangeal joint, certain extensions under the big toe can be added to the foot orthotic for accommodation.

If the position of the big toe is flexible, splints can be worn at night to help pull the big toe in to a straighter position in an attempt to delay the progression of the big toe moving towards the lesser toes. Spacers can also be used between the big and second toe to help promote a straighter alignment of the big toe. For every day footwear it is important to have a wide enough toe box to accommodate the volume of the child's foot while weightbearing. Footwear with soft upper materials are beneficial to minimize any irritation between the shoe material and foot. Examples of these materials are a soft leather or mesh. For athletic shoes it is important to be in the right style of shoe based on the child's foot mechanics. Have your child's gait checked by a certified professional before buying the shoes.

