



## Bunions (Hallux Valgus)

### Description

One of the more common conditions treated by podiatric surgeons is the bunion. Bunions, medical terminology, Hallux Valgus, is a prominent bump on the inside of the foot around the big toe joint. The deformity arises when a progressive dislocation of the joint causes the big toe to drift toward the second toe. This bump is actually a bone protruding towards the inside of the foot. With the continued movement of the big toe towards the smaller toes, it is common to find the big toe resting under or over the second toe. This condition worsens over time leading to discomfort and skin problems, such as corns and lesions, and difficulty walking. Some of the symptoms of bunions include inflammation, swelling, and soreness of the big toe joint. The discomfort commonly causes a patient to walk improperly.

Another type of bunion which some individuals experience is called a Tailor's Bunion, also known as a bunionette. This forms on the outside of the foot towards the joint at the little toe. It is a smaller bump that forms due to the little toe moving inwards, towards the big toe.

### Causes of Bunion Deformity

Bunions develop from abnormal foot structure and mechanics (excessive pronation), which place an undue load on the big toe joint. The forces imparted by the misaligned, outward-bending toe stretch the ligaments that connect the foot bones, pulling against the tendons, gradually drawing the big toe farther out of line. Over time, the big toe continues to twist out of its original position until it no longer lines up properly. Pressure from the big toe can lead to deformities of the smaller toes by pushing against them. In some cases, the second toe may ride up and over, or down and under, the big toe.

### Progression

Typically, bunions begin as a mild bump or outward bending of the big toe that is only a cosmetic concern at first. However, beneath the surface, strong forces are at work.

The condition becomes painful as the bunion progresses. The bunion changes the shape of the foot and the biomechanics of walking become altered. As the bunion worsens the protective cartilage within the big toe joint begins to deteriorate, leaving the joint damaged and a decreased range of motion occurs and an arthritic joint develops. The weakening the big toe joint bone also occurs as the bunion becomes larger in size, actually causing bone cysts to develop with the bone.

### Treatment

Treatments for bunions vary depending on the severity of the deformity. Evaluation should be sought at the first sign of pain or discomfort. A biomechanical and radiographic exam would determine the appropriate level of treatment. When there is actual bone displacement and joint malalignment, a surgical procedure called a bunionectomy would be beneficial. By properly aligning the big toe joint bone, the big toe can function at its best and prevent further erosion of the joint surface.

### Glossary of Terms

**Bunion** Bump on the side of the foot at the base of the big toe

**Bursitis** An inflammation of a fluid sac often found overlying a bunion

**Hallux Valgus** Medical term describing the deviation of the great toe toward the 2nd toe; common component of bunions

**Metatarsal** A long bone of the foot that forms the ball of the foot

**Orthoses** Devices made from a mold of the foot used to control abnormal motion of the foot; may be prescribed to prevent progression of bunion deformity

**Osteotomy** Surgical procedure that creates a cut in a bone to achieve realignment

**Pronation** Motion of the foot which when excessive results in flattening of arch; common cause of bunion formation