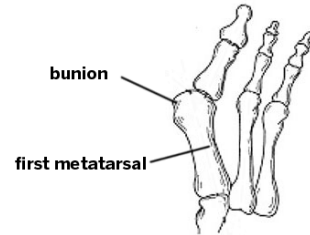


Bunions (Hallux Valgus)

What is a bunion?

A bunion, or hallux valgus deformity, is a deformity of the forefoot where the first metatarsal deviates towards the inside of the foot creating a prominence on the inside of the toe. This has the effect of widening the forefoot and pulling the big toe towards the second toe.



Due to the widening of the forefoot, the metatarsal head can rub against the inside of the shoe causing irritation of the bursa along with redness and swelling. Over time, as the size of the deformity increases the big toe can drift towards the lesser toes causing pressure and pain, sometimes resulting in the development of a callus or ulcer. Additionally, patients may notice symptoms of pain underneath the second toe. This is because, as the first metatarsal continues to deviate away from the other toes, the second toe is responsible for bearing an increasing amount of weight thereby causing pain and irritation and this is referred to as “transfer metatarsalgia”. This can result in the development of hammertoes, and in the most severe cases the big toe can cross underneath the second toe resulting in a “crossover toe” deformity.

Are all bunions painful?

Oftentimes bunions are non-painful and are merely a cosmetic deformity. However, many patients who are initially non-painful will experience pain as the size of the deformity increases due to the issues discussed above. Also, it is not uncommon for patients with smaller bunions to also experience pain.

What causes a bunion?

Bunions are much more common in women than men, and are twice as common among people over age 60 compared to younger adults. The development of a bunion is likely hereditary, however, it is also believed that wearing closed toe shoes or high heels may have an effect on the development and progression of the deformity.

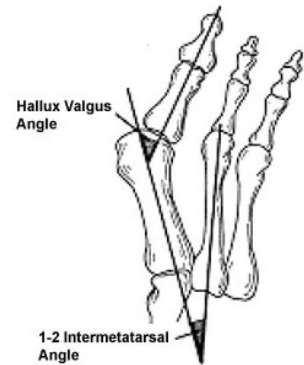
What should I do if I have a painful bunion?

For patients with painful bunions there are several conservative treatment options that may provide significant relief. These include bunion pads and taping of the toes, transition to shoes with wider toe boxes, orthotics and toe spacers, NSAIDs, and physical therapy. If extensive conservative treatment does not provide relief than some patients may benefit from surgery.

How is a bunion diagnosed?

During the initial evaluation for a painful bunion by an orthopedic surgeon you will undergo a thorough evaluation. This will include evaluation of the foot looking for any skin changes including redness, swelling, callus formation, or ulcerations. The position of the forefoot, including the size of the hallux valgus deformity and any changes in the position or appearance of the lesser toes such as hammertoes or crossover toe deformities. The physician will also evaluate the big toe for pain with range of motion, possibly indicating arthritis if pain is present.

Finally, x-rays of the foot will be performed which can provide vital information regarding surgical treatment options if indicated. Additionally, x-rays allow for measurement of the size of the hallux valgus deformity and evaluation for the presence of arthritis. Common x-ray measurements that will be reviewed with the patient include the Hallux Valgus Angle (HVA) and the 1-2 Intermetatarsal Angle (IMA).



What are the surgical treatment options available?

For patients with a painful bunion and arthritis of the big toe, a fusion of the joint involving the bunion is recommended. For patients with smaller deformities, i.e. lower hallux valgus angle and 1-2 IMA, several techniques are available that generally include cutting the first metatarsal and shifting the first metatarsal head towards the second metatarsal and fixing it in place with a screw. For more severe deformities, shifting of the entire first metatarsal towards the second metatarsal and holding it in this position with plates and screws is often indicated. In all cases, a bunionectomy, or shaving of the extra bone from the first metatarsal head, is performed.

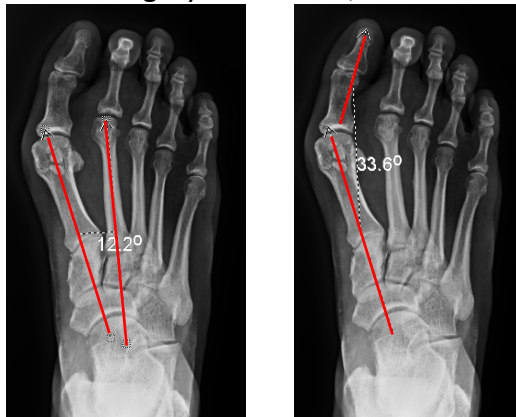
What should I expect after surgery?

You should speak with your orthopedic surgeon regarding their specific postoperative protocol for bunion surgery. For my practice, patients undergoing surgery for arthritis of the big toe and smaller bunions are allowed to weight bear in a stiff postoperative shoe the day of surgery. For more severe deformities requiring larger corrections, patients are typically immobilized in a splint and removable boot for a total of six weeks after surgery. All surgeries are “same day surgeries” meaning patients leave the same day that the surgery is performed.

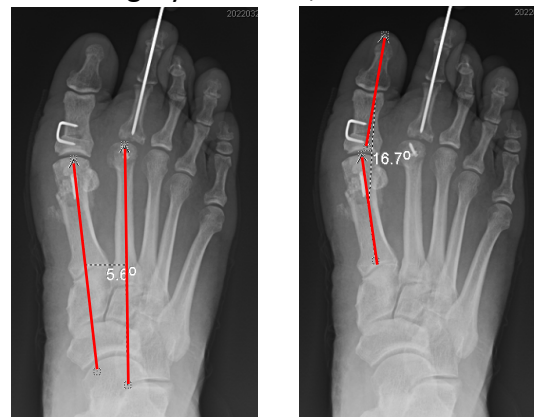
Case examples

59-year-old male with painful bunion with moderate deformity.

Before Surgery: IMA= 12.2, HVA= 33.6

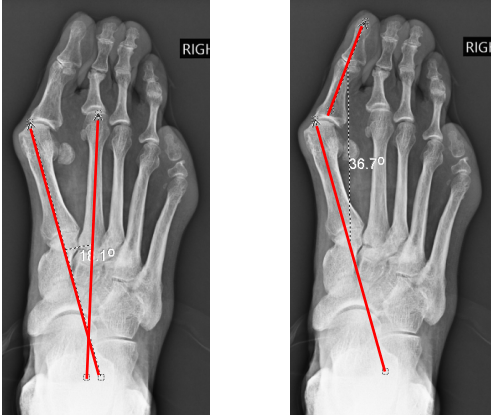


After Surgery: IMA=5.6, HVA= 16.7



70-year-old female with painful bunion with severe deformity.

Before Surgery: IMA= 18.1, HVA= 36.7



After Surgery: IMA= 6.2, HVA= 4.0

