



When the Foot Hits the Ground from Toe to Heel

How to keep your feet
healthy and prevent
foot disorders.

Series 1: Bunions

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How to keep your feet healthy and prevent foot disorders

Feet are the foundation of health and wellness of our body; however, they can be the most neglected part of our body. 'Oh, my aching feet' can get in the way of living a fully functioning lifestyle whether it is work or play related.

Series 1: Bunions

The first version is about one of the most common foot ailments, Hallux valgus, commonly known as a bunion.

We will continue to add to and update this e-book with information about other common foot disorders, so check back with us periodically. This is just the beginning - we want people who have suffered from foot pain to contribute.

Help us to help everyone

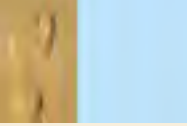
Help us make this book fun, relevant and current for everyone with aching feet. Feel free to submit studies, articles, photos, videos by email to info@alphaorthotics.com.

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Anatomy of the Foot

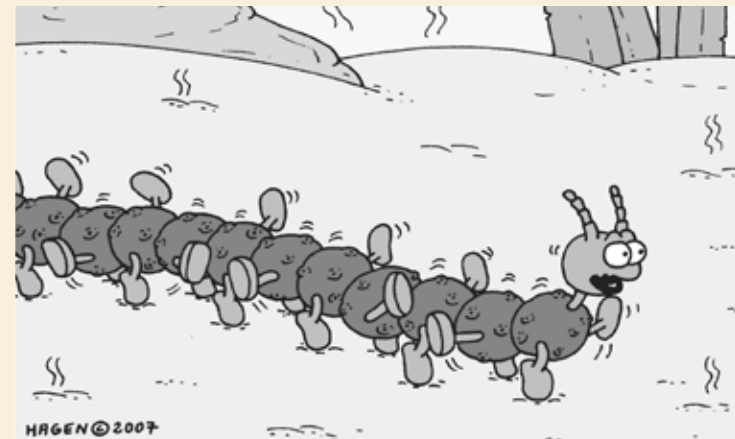
Did you know that the average 130-pound person absorbs as much as 1.5 million pounds of step impact through his or her feet each day? That's 400 million pounds a year that your feet have to carry.

Ouch!

Your feet work for you the whole day, whether you stand, play, run or walk. Your feet sustain forces of up to 120% of your body weight – that is an enormous amount of wear and tear. That is why your feet are subject to more injury than any other part of the body. Without attention and proper care, foot disorders are likely to develop with age.

Factors that affect your feet include:

- Activity level – Being physically active improves your balance, strengthens your muscles and bones, keeps your toes flexible, elevates your mood and reduces your risk of disease.
- Weight – “Active people who are ten pounds overweight and take 10,000 steps a day, subject their feet to 100,000 pounds of extra impact each day. More sedentary people who are 30 pounds overweight and take 5000 steps per day subject their feet to 150,000 pounds of additional impact”.
- Occupation – Sitting or standing for long hours will affect the condition of your feet. Moderate activity is the best way to exercise the muscles and keep them healthy.
- Health - Foot problems can sometimes foretell a more serious condition such as arthritis, diabetes, nerve and circulatory disorders.
- Footwear - Properly fitting footwear (and replacing worn footwear) can play a critical role in preventing foot problems.



Ouch, ouch, ouch, ouch, ouch, ouch, ouch, ouch, ouch!
Boy I hate hot sand...

Feet endure tremendous pressure during our daily living. An average day of walking brings a force equal to several hundred tons on them.

High heels increase the walking pressures on the metatarsals from 22% to 90%².

According to the American Podiatric Medical Association, by age 50, the average person has walked 55,000 miles or the equivalent of three laps around the earth.



Your foot is made up of:

- 26 individual bones
- 33 joints
- 107 ligaments (tissues that connect bones to other bones)
- Tendons (fibrous tissues that connect muscles to bone)
- 100+ muscles
- A roadmap of blood vessels, nerves skin and soft tissues

Facts about your feet

- One fourth of all the bones in the human body are located in your feet.
- The skin on the bottom of your foot is twice as thick as the skin on the rest of your body. It contains millions of specialized nerve fibers that help us to maintain our balance³.
- Skin, blood vessels, and nerves give the foot its shape and durability and provide cell re-generation and essential muscular nourishment⁴.
- Despite the small size of our foot bones, they are dense and strong and capable of sustaining large amounts of weight-bearing stress.
- The small foot bones make up in strength what they lack in size.
- Bones adapt to the stress placed upon them. For example, heavier people have denser bones than lighter people; runners have denser bones than swimmers.
- Running exerts three to four times the amount of pressure on your feet as compared to walking.



Feet Provide Support, Balance and Mobility

The foot is a strong and complex machine that is both a shock absorber and a propulsion engine. The foot is composed of an intricate matrix of bones, joints, tissues, tendons, nerves, muscles and ligaments that enable this amazing machine to withstand an enormous amount of weight bearing stress while maintaining balance and flexibility.

Forefoot

The forefoot bears half the body's weight and balances pressure on the ball of the foot. Your forefoot is composed of the five toes (called phalanges) and their connecting long bones (metatarsals). Each toe is made up of several small bones, and together they provide stability for the foot.

The big toe (also known as hallux) has two phalanx bones. It articulates with the head of the first metatarsal which is called the first metatarsophalangeal joint (MTP). The MTP joint is a common area for foot problems to develop.

Your other four toes have three bones and two joints. These joints form the ball of the foot. Movement of these joints is very important to ensure a normal walking pattern.





90% of women wear shoes that are too narrow. This can cause the big toe to bend towards the smaller toes, thrusting the big toe joint outward resulting in a bunion.

Of those who report foot problems, the vast majority experience pain in the forefoot.

The big toe takes almost half of our overall body weight and allows us to balance. It is also the most important toe for walking.

Midfoot

Your midfoot forms the foot's arch and absorbs any harsh impacts on the feet. It has five irregularly shaped tarsal bones that are connected to the forefoot and the hindfoot by muscles and the plantar fascia (arch ligament). These tarsal bones change their shape allowing you to walk on a multitude of surfaces⁶.

The small bones of the foot and the soft tissue structures that connect them are arranged in a way that enables the foot to transfer weight from the heel to the toes while walking and running.

Rearfoot

The two bones that make up the back part of your foot are the talus and the calcaneus, or heel bone. The three joints in the rearfoot link the foot and the ankle. The top of the talus is connected to the two long bones of the lower leg (tibia and fibula), forming a hinge that allows your foot to move up and down.

The heel bone is the largest bone in your foot. It joins the talus to form the subtalar joint. A layer of fat at the bottom of the heel bone cushions your heels on impact and thins with age⁷.

Muscles, Tendons and Ligaments

Muscles

There are 20 muscles in your foot that give it shape by holding the bones in position. The muscles' lengthening and shortening enable movement.

- Anterior tibial - allows your foot to move upward
- Posterior tibial - supports your arch
- Peroneal tibial - controls movement on the outside of your ankle
- Extensors - raise the toes to initiate the act of stepping forward
- Flexors - help stabilize your toes against the ground. Smaller muscles enable the toes to lift and curl⁸.

Ligaments & Tendons

Your ligaments are the soft tissue that connects bone to bone, whereas, your tendons connect muscle to bone. Both ligaments and tendons are made up of many small fibers that enable flexibility, movement and impact absorption.

The largest ligament, the plantar fascia, forms your arch on the sole of your foot from the heel to the toes. By stretching and contracting, this ligament allows the arch to curve or flatten, providing balance and giving the foot strength to initiate walking.

The most famous tendon is the large Achilles tendon which attaches your calf muscle to your heel bone enabling you to rise up on your toes and walk, run, and jump.

Anatomy of the foot & ankle - dorsal view



Get a quick and clear description of the biomechanics of the foot⁵ by viewing [this video](#).

For an in-depth understanding of the biomechanics of the foot's role in propelling you during daily activities such as walking and running see [Dr. Stephen M. Pribut](#).

Additional educational resources about the anatomy of the foot can be found at the [American Orthopaedic Foot & Ankle Society](#).



Videos

Videos on how your foot posture affects the health of the rest of your body are made possible by the Gait and Posture Clinic:

Excess pronation affects a great many people

Foot posture can affect your knees

Foot posture can have an affect right up to your neck

Relationship of Feet to Lower Extremity

Taking care of your feet is critical to taking care of the rest of your body. Chronic pain of the knees, hips, back or neck can actually originate from having poor posture of the feet. If the bones in your feet and ankles are not properly aligned, the distribution of weight and excessive pressures in the wrong place can adversely affect other parts of the body.

A structural flaw or malfunction in any one part of the foot can result in the development of problems elsewhere in your body¹⁰.

"When the foot pronates or collapses it causes the shins to rotate inwards, which causes the hips to rotate inwards, which causes the pelvis to rotate forwards and this results in a forward centre of gravity. As a result people arch their lower back and put a lot of pressure on their lumbar spine. This has an effect all the way up to your neck, and correcting foot posture, the foundations of your body, can relieve or even cure back pain.¹¹"

The Achilles Heel

Achilles was the son of Thetis and Peleus, the bravest hero in the Trojan war, according to Greek mythology.

When Achilles was born, his mother, Thetis, tried to make him immortal by dipping him in the river Styx.

As she immersed him, she held him by one heel and forgot to dip him a second time so the heel she held could get wet too.

Therefore, the place where she held him remained untouched by the magic water of the Styx and that part stayed mortal or vulnerable.

To this day, any weak point is called an "Achilles' heel". The strong tendon that connects the calf muscles to the heel bone is the "Achilles' tendon"⁹.

Taking Care of Your Feet

Easy steps to taking care of your feet:

1. Buy your shoes by fit, not by size. Try them on towards the end of the day since your feet tend to swell during the course of the day. In a 1993 survey of healthy women, at least 88% of the women wore shoes that were smaller than their feet (on average 1.2 cm smaller) and of those, 80% had foot pain¹².
2. Frequently soak, scrub, and massage your feet, toes and ankles. Epsom salt is known to help sooth away bunion pain, for example.
3. Exercise your feet. In today's Western style society where people wear shoes most of the day, your feet, the bones, muscles, and tendons within, do not get the movement required to stay healthy as compared to those societies who do not wear shoes.

Keep Your Feet Flexible

We all know how to keep our biceps in shape, but few of us know how to keep toes in good condition. They take significant abuse from the hours we spend on our feet each day, especially in high-heel shoes. The American Orthopaedic Foot and Ankle Society recommends doing these simple exercises to strengthen your toes and prevent foot discomfort. Dancers, runners and, frankly, all shoe wearers, will benefit from these exercises.



If you don't love your feet, no one else will

Wear high heels for special occasions, and even then, only a heel height of 1 ½ inches. Your feet and body will thank you. And you will save money on trips to the podiatrists office¹³.

American Orthopaedic Foot and Ankle Society recommended exercises:¹⁴

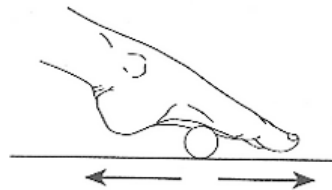
Sand walking

At the beach, take off your shoes and walk in the sand. This not only massages your feet, but strengthens your toes and is good foot conditioning. Watch for glass!



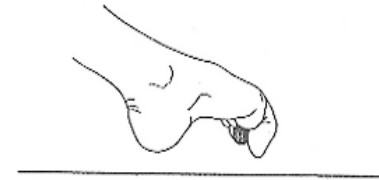
Golf ball roll

Roll a golf ball under the ball of your foot for two minutes. This is a great massage for the bottom of the foot. Recommended for plantar fasciitis (heel pain), arch strain or foot cramps.



Marble pick-up

Place 20 marbles on the floor. Pick up one marble at a time and put it in a small bowl. Do this exercise until you have picked up all 20 marbles.



Toe Point

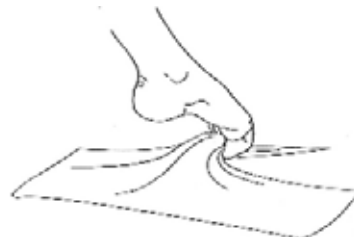
Toe raise, toe point, toe curl: Hold each position for 5 secs - repeat 10x.



Good for hammertoes or toe cramps.

Towel curls

Place a small towel on the floor and curl it toward you, using only your toes.



Increase the resistance by putting a weight on the end of the towel. Relax and repeat this exercise 5x. Good for hammertoes, toe cramps and pain in the ball of the foot.

Shoes: Fashion vs. Function

Footwear is a fashion statement, and women, in particular, will sacrifice function for fashion even when it can be painful.

First there were rigid corsets, bustles packed with horsehair and lice, hobble skirts so walking was almost impossible. Now the fashion must-haves are huge handbags, Spanx®, decorative contact lenses, tight jeans, platforms and extreme Stilettos. On one hand fashion has taken a step backwards, on the other, the footwear industry is progressing forward to fashionable and healthy shoes.

Humans have been protecting their feet since pre-history. But only in the last two decades has mass fashion embraced function, and function embraced fashion. This shift has resulted in affordable comfort-fit footwear which combines comfort with style.

What to expect from high heels:

Despite progress by industry, a new study suggests 25% of the shoes Americans own are too uncomfortable to wear¹⁵.

High heels are bad for your feet...here's what you can expect from wearing high heels:

- Bunions and Hammer toes
- Shortening of the Achilles tendon
- Stress fractures and enormous pressure on the ball of the feet
- Squeezed toes, eventually turning your feet inward

Also, high heels are bad for your body. . . "A heel that is three inches high creates seven times more stress than a one-inch heel," reports the American Academy of Podiatric Sports Medicine¹⁶.



"Let's face it, there's nothing like walking around in really sexy shoes, but if you can't hide the grimace of pain or oozing blood or swelling toes..."

Renee Sedliar - Victim of 4 inch red sandals.

Shoes with pointed toes and high spike heels are cruel because they cause crowding of the toes and increased pressure which can result in hammertoes and bunions¹⁷.

In traditional China (10th through 20th century), the practice of female foot binding stunted the growth of the feet of young girls, resulting in a very tiny, intensely painful and deformed foot¹⁸.



Since the nomadic hunter-gatherers, footwear has evolved to combine function with fashion:

- 500,000 years ago – Homo erectus experimented with crude forms of footwear to protect feet and improve hunting abilities.
- Classical Greek period – Greeks wore simple sandals for protection from rough terrain during military and sports activities.
- Medieval times – Italian cities introduced fashion to footwear with Stiletto heels and winkle-picker pointed toe boxes.
- Renaissance era – France further enhanced shoes designs with buckles, brocade, and jewelry.
- 18th & 19th Centuries – England reintroduced the practical side of footwear for the functions of military combat, walking, and specialized sports.
- Mid-20th Century – Two distinct camps surfaced: fashion became more bizarre and impractical, and function became more scientific.
- 1990's – The Dawning of the Biomechanics Era is helping footwear styles combine function with style resulting in attractive, everyday lifestyle shoes¹⁹.

Choose your shoes wisely

1. Small heel no higher than 1.5 inches
2. Purchase by fit not by size. Make sure there is a ½ inch from your longest toe to the tip of the shoe.
3. Wide toe box helps avoid bunions, hammertoes and corns.
4. Arch support can prevent and relieve foot pain while providing comfort by distributing your weight more evenly. This will result in better posture and more balance and make you less prone to falls or twisted ankles
5. Choose good quality materials like soft leather or mesh so your feet can breathe.
6. Flexibility at the forefoot so the toes can bend.
7. Stretching shoes rarely works – don't buy them if they're tight.
8. Shop later in the day – your foot swells as the day goes on.

Seriously consider the styles of your shoes

- Flip flops, sandals and ballet flats should be worn only for short periods of time. Without arch support, your heels absorb more pressure when you walk and can aggravate conditions such as plantar fasciitis. Constantly wearing these styles actually change the shape of your feet and can cause the bones in your feet to actually spread out. Because of the lack of support your knees and the muscles in your calves will suffer, and even change your posture placing more stress on your back!
- Dress shoes. Remember try to avoid high heels and pointy toe shoes.
- Boots. Wear them only if they feel comfortable when you try them on. Don't buy them if you think you have to break them in.

Nothing like a Footwear Fashion Calendar from the APMA to guide you through the shoe maze.



All About Bunions (Hallux valgus)

Hallux valgus (Bunions) are a very common foot ailment

Does your big toe move in towards your little toes or is the joint at the base of your big toe thrusting outward, creating a bump that can be painful? If so, most likely you have Hallux valgus, most affectionately referred to as a bunion.

Bunions are common among many cultures and within many countries. Because of the prevalence of this foot disorder, a lot of medical information and research is easily available. There are many ways to intervene in the early stages, preventing the progression of the mal-alignment, and if necessary, there are many forms of surgery to remove the bunion.

It might make you feel better to know you are not alone. In the US alone, an estimate of over ½ of women have some degree of Hallux valgus, and a lesser amount among men²⁰. Even sports professionals, such as Fred Lewis of the San Francisco Giants, can be inflicted by bunions.

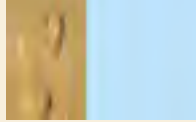


Fred Lewis

“Fred Lewis of the SF Giants was bothered by bunions for most of last year.

It’s impossible to know how many bases Fred Lewis would’ve stole if not for the bunions, but I’m gonna guess more than the 21 he did steal. He also missed quite a few games with this chronic foot-to-path disease.

It’s hard to say how many home runs he would’ve hit if he didn’t miss all of those games, but, like a foot, I’m gonna go out on a limb and say more than the 9 he did hit.²¹”



Hollywood shoe styles

Celebrities such as Cameron Diaz, Victoria Beckham, and Oprah have bunions, yet they still walk the red carpet in the highest or most constricted shoes.

What is a bunion?

In orthopedics, “bunions” and Hallux valgus are terms used to describe one of the most common ailments of the foot. A bunion is a misalignment of the two bones that form the base joint of the big toe (also called the metatarsophalangeal joint). Due to the misalignment, the big toe begins to angle inward towards the other toes, thrusting the base joint out further in the opposite direction. Aside from being unsightly, bunions can develop into an extremely serious, painful condition over time, if neglected.

What are the symptoms?

It is misleading to think you do not have a bunion unless you incur pain. In general, it can take many years for a bunion to develop, and especially to the point of pain. Early signs of a bunion include:

- Early movement of the big toe towards the smaller toes
- Bump on the base joint of the big toe
- Deep dull “in the joint” pain
- Pain on top or side of the big toe from shoe pressure

Progressive symptoms include:

- Continued malpositioning of the big toe and base joint
- Increasing pain when walking, running or standing
- Formation of calluses on the medial border of the big toe
- Chronic irritation of the skin and base joint bursa (small, fluid-filled sac designed to cushion friction between bone, muscle, tendons, and skin around a joint)
- Progressive arthrosis (degenerative disease of the joint) and/or arthritis and stiffening in the base joint of the toe
- Podiatric deformities such as hammer and claw toe



Stages of bunion severity

There are varying degrees of Hallux valgus. Once you suspect you have a bunion, visit your primary physician or a podiatrist to confirm whether you have Hallux valgus and to obtain advice. In the meantime, you can refer to the following stages to help understand the severity of the condition:

1st Degree



Toe malpositioning below 20 degrees.

No symptoms. A brace or splint can be used in this phase for early prevention!

2nd Degree



Malpositioning between 20 and 30 degrees.

Occasional pain. In this phase, a brace or splint is used more frequently to correct the malpositioning.

3rd Degree



Malpositioning between 30 and 50 degrees.

Regular pain. Increasing restraints on activities. Pronounced malpositioning!
A consultation with a medical care professional is recommended prior to using a brace or splint.

4th Degree



The most severe form of bunions, with malpositioning over 50 degrees and painful restraints on everyday activities.

If your physician has recommended surgery, a brace or splint might be recommended to assist in post-surgical rehabilitation.



Women are affected about nine times more often than men, suggesting the propensity of wearing stylish, constrictive shoes lead to the development of bunions²².

The causes of bunions

Hallux valgus is most common among women ages 40 and over. Although it is less frequent for men to experience bunions, when they do suffer from this foot disorder, the mal-positioning of the big toe can be extreme and quite debilitating.

With the increased emphasis on playing and excelling in sports at earlier ages where constricted shoes are required, such as soccer, football, and ballet, and with the peer pressure to wear high-heeled constrictive fashionable shoes in the early teens, the onset of bunions is beginning to appear in people younger than forty.

Bunions are initially caused by genetic bone structure and often get worse by wearing tight, pointy-toed and high-heeled shoes, as well as "load deformities" such as flatfoot and splayfoot. These deformities as well as excessive pronation where the foot rolls inward can place too much pressure on the big toe joint (metatarsophalangeal joint) causing the big toe to bend towards the smaller toes.

The consequences of bunions

The small joints of your feet support your body's full weight as you walk, run and climb stairs throughout the day. The base joint of your big toe bears most of that stress. When your feet are properly aligned, the biomechanical system works beautifully; but with bunions, the mechanics change, shifting stress to the other joints in the foot. The base joint also begins to lose its range of motion. Combined, these factors can cause the base joint to become swollen and painfully inflamed, and can eventually lead to progressive arthrosis and/or arthritis.

Once a bunion develops to the point of restricting daily activities and exercise, weight gain and other related conditions may result. Coincidentally, an additional five pounds of pressure is transferred to your joints for every one pound of weight you gain, further compounding the problem.

In the older population, ages 75 – 93, findings indicate that bunions have a significant detrimental impact on gait patterns that can in turn contribute to instability and risk of falling²³.

Another unfortunate consequence of having a bunion is the cost of bunion surgery and the associated downtime which together can exceed \$5000.

For these reasons early intervention to prevent the progression of the misalignment is highly recommended.



Once a bunion develops to the point of restricting daily activities and exercise, weight gain and other related conditions may result.



Videos

Online videos are easy sources for getting important prevention tips.

Two informative videos to help you learn more about bunion surgeries, courtesy of Pre Op Patient Education:

[Pre Op Patient Education 1](#)

[Pre Op Patient Education 2](#)

Early prevention

If you have mild to moderate degrees of Hallux valgus (Stage 1 or 2), you can take steps to stop the progression, and in some instances, even correct the alignment and reduce the pain. But you must do the following:

1. Change shoes! Avoid flip flops, high-heeled shoes, and pointed, narrow toe box shoes.
2. Exercise your feet.
3. Medicine will not prevent or cure bunions. However, the use of non-steroidal anti-inflammatory drugs such as aspirin and ibuprofen, or acetaminophen, such as Tylenol may relieve the pain.
4. Use of bunion pads, metatarsal pads, and arch supports can help redistribute weight and move pressure away from the big toe.
5. Wear splints or braces. There are many types of orthotics that help correct the mal-positioning and reduce pain: toe gels, soft splints, rigid splints, and flexible splints.

More about splints and braces

In general there are soft splints which help protect the bunion and there are rigid splints that support and pull the big toe away from the other toes. More recently, an innovative patented technology has been introduced to the U.S. market. This award-winning hinged splint combines the comfort of a soft splint with the corrective support of a rigid splint to provide mobility and correction through the range of motion.

Because the Hallux valgus angle (HVA) is the main derivative of Hallux valgus, the HVA, therefore, is the most common measurement of correction. With daily compliance, the flexible hinged splint from Alpha Orthotics has been clinically proven to correct the malpositioning of the big toe in mild-to-moderate cases of Hallux valgus.

Surgical solution

If you have severe Hallux valgus, and your doctor recommends surgery, educate yourself on the various types of surgery and post-operative care. With over 100 types of surgical techniques, many resources are available that provide clinical studies and information. The technique prescribed depends on the specific bunion condition and severity of the deformity.

Trevor Prior, Consultant Podiatric Surgeon, Homerton University Hospital, provides an overview of the various types of surgeries²⁴:

- Silvers procedure – this is the simplest procedure that involves removing the prominent bump on the inside of the foot. But because it doesn't cure the underlying deformity, it will only be used in people with mild deformities or in older people. This is a short procedure and recovery is quick.
- Austin (Chevron)/Reverdin - green osteotomies – these involve cutting the bone toward the end of the first metatarsal (the long bone leading up to the big toe), before fixing it back into a straighter position. You'll need to rest the foot for two to four days. You'll be able to do limited walking and on average, be able to get back into shoe 2-6 weeks after the operation. You'll walk normally around three months after the operation
- Scarf osteotomy – This is similar to the above technique but because more bone is cut, it allows for slightly more correction. Recovery is the same as for the above procedure.
- Base wedge osteotomy – This is for more serious deformities. A small wedge of bone can be removed from the base of the metatarsal. Recovery is longer. You'll need to wear a non-weight bearing cast for 4-6 weeks (ie you can't walk on it) and possibly a weight-bearing cast for 2-4 weeks.
- Lapidus – This is very good for people that have a mobile metatarsal. By removing the bone in a wedge shape from either side of the joint at the base of the metatarsal, this allows the surgeon to correct the position of the metatarsal while fusing the joint, making it more stable. Recovery is similar to that of the base wedge.



The average cost of bunion surgery exceeds \$5,000 per foot

1. Operation approx \$2000 per foot, after insurance
2. Lost income: \$2608 (4 wks off work at \$652 wk)
3. Post-operative boot: \$16 - \$115
4. Post-surgery medications
5. Anti-inflammatory: \$21 - \$65
6. Painkillers: \$61 - \$115
7. Cold compressors: \$7 - \$72 per cold pack
8. Epsom salt or foot soaks: \$4 - \$22
9. Support wraps and pads
10. Splints: \$8 - \$70
11. Plastic wraps and tape: \$3.50
12. Crutches: \$20 - \$50
13. Physical therapy: cost depends on insurance plan
14. Inability to drive: 4 - 6 wks
15. Inability to stand/walk normally: 3 wks - 3 mo
16. New shoes

Source: www.alphaorthotics.com



"A review of surgeries indicates that up to 33% of people who have surgery for bunions are disappointed in the result, despite pain being reduced and the toe being straighter."²⁵

- Akin osteotomy - In many deformities, you need to straighten the big toe as well as the position of the first metatarsal. A small wedge of bone can be removed from the base of the big toe. This is usually done in conjunction with one of the above procedures and doesn't lengthen the recovery period.
- Keller arthroplasty – this involves removing the bone at the base of the big toe and essentially removing half of the big toe joint. However, this can leave the big toe a little bit unstable and is mainly used for older people with arthritis. Recovery is slightly quicker to that of the Austin procedure.

Post-op rehab is important

Once the surgery is performed, it is easy to conclude the bunion is gone forever. However, there are cases where the malpositioning of the big toe returns. Therefore it is important to follow the preventive measures on an ongoing basis:

1. Wear wide-fitting toe box shoes
2. Avoid constrictive, high-heeled shoes
3. Exercise your feet
4. Wear a corrective flexible bunion splint, as needed.
5. Get back to an active daily life.



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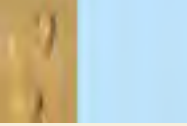
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At the beach, take off your shoes and walk in the sand. This not only massages your feet, but strengthens your toes and is good foot conditioning.

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