

# Results of Surgery to Correct Tailor's Bunions

Most people are familiar with bunions of the big toe but have you ever heard of a bunionette on the little toe side of the foot? With a bunion of the big toe, a large bump seems to grow out of the side of the great toe. But in fact what is happening is that the two bones that meet to form the big toe joint angle away from each other. A bump we call a bunion forms at the end of the metatarsal (long bone of the toes).

The bunion that develops is actually a response to the pressure from the shoe on the point of this angle. At first the bump is made up of irritated, swollen tissue that is constantly caught between the shoe and the bone beneath the skin. As time goes on, the constant pressure may cause the bone to thicken as well, creating an even larger lump to rub against the shoe.

A bunionette is similar to a bunion, but it develops on the little toe side of the foot where the small toe connects to the foot. This area is called the metatarsophalangeal joint, or MTP joint. A bunionette here is sometimes referred to as a tailor's bunion. It formed because tailors once sat cross-legged all day with the outside edge of their feet rubbing on the ground. This produced a pressure area and callus at the bottom of the fifth toe.

Today a bunionette is most likely caused by an abnormal bump over the end of the fifth metatarsal (the metatarsal head) rubbing on shoes that are too narrow. Some people's feet widen as they grow older, until the foot splays. This can cause a bunion on the big toe side of the foot and a bunionette on the little toe side if they continue to wear shoes that are too narrow. The constant pressure produces a callus and a thickening of the tissues over the bump, leading to a painful knob on the outside of the foot.

Treatment initially is directed at obtaining proper shoes that will accommodate the width of the forefoot. Pads over the area of the bunionette may help relieve some of the pressure and reduce pain. These pads are usually sold in drug and grocery stores. They are small and round with a hole in the middle, like a small doughnut.

If all else fails, surgery may be recommended to reduce the deformity. The surgeon may shave the metatarsal head and reshape it but recurrence of the problem is reported with this approach. More often, the surgeon will opt to remove the prominence of bone underneath the bunion to relieve pressure. Surgery may also be done to realign the fifth metatarsal if the foot has splayed. The bony bump can be removed (cut out) with a small chisel or saw and the remaining bone edges smoothed. Once enough bone has been removed, the skin is closed with small stitches.

If the angle of the metatarsal is too great, the fifth metatarsal bone may be cut and realigned. This is called an osteotomy. Once the surgeon has performed the osteotomy, the bones are realigned and held in position with metal pins or wires. The hardware remains in place while the bones heal (usually four weeks).

Now the osteotomy procedure can be done percutaneously. The surgeon can insert the surgical instruments through a very small incision that doesn't require opening the foot up with a large incision. The obvious advantages to this technique are shorter operating time and fewer complications. Of course the next question is: how well does the percutaneous osteotomy for Tailor's bunions work?

Surgeons from the University of Verona in Italy report on the results of a series of 21 patients who had a total of 30 percutaneous osteotomies of the fifth metatarsal. They used X-rays to look at the results and patient interviews to find out about patient pain, function, and satisfaction.

Once the osteotomy was done and the bones were realigned properly, the surgeon used a kidney-shaped pad under the fifth metatarsal with tape to reduce pressure on the surgical site and to hold the corrected alignment during healing (about six weeks). Patients were allowed to walk without crutches but they did use a special shoe with a flat rigid bottom (sole). The shoe kept them from bending the toes and thus from putting pressure on the base of the toes.

Everyone was followed for at least three years. Some patients have been in the study for as long as 12 years. The results are reported as follows: 73 per cent (almost three-fourths of the patients) had no pain and no limitations after recovery. Twenty per cent (20%) had to wear comfortable shoe and experienced mild decrease in function. And seven per cent (7%) still had pain due to mild, persisting malalignment.

X-rays showed complete and successful union of the bones at the osteotomy site for all patients in the study. No one reported stiffness of the fifth metatarsal joint. There were no other reported complications or problems.

The authors concluded that percutaneous osteotomy for Tailor's bunionette is safe, reliable, and effective. The short operative time, minimal disruption of soft tissues around the bone, and quick return to weight-bearing status are three major advantages of this updated surgical technique.

Reference: Bruno Magnan, MD, et al. Percutaneous Distal Osteotomy of the Fifth Metatarsal for Correction of Bunionette. In *The Journal of Bone and Joint Surgery*. November 16, 2011. Vol. 93-A. No. 22. Pp. 2116-2122.