



London Bridge Hospital

# Health Matters

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# New Techniques for Managing Painful Bunions

**Painful bunions or Hallux Valgus can cause aching feet, difficulties with shoe wear, problems with the lesser toes and, if untreated, predisposition to arthritis of the big toe. Historically, surgical correction of bunions has had a poor reputation. Newer techniques are associated with better results, reduced pain and stiffness and allow immediate weight-bearing.**

## How does a bunion form?

The bunion is an exostoses of new bone and soft tissue. The bulk of what we call a bunion is the metatarsal head that has drifted inwards (See Figure 1a, 1b). On squeezing into a shoe, there is an increased laterally directed pressure on the phalanx of the big toe. Initially, the toe corrects itself when the shoe is removed but with time the deformity becomes stuck down and fixed. The proximal phalanx of the big toe pushes the metatarsal head more medially, worsening the deformity. Many patients also have a positive family history for Hallux Valgus.

## What simple non-surgical methods can we try when they first present?

Appropriate shoe wear is the key. I advise patients to wear soft lace-up leather shoes or trainers for commuting to work or walking long distances. They can keep a pair of formal shoes under their desk for meetings. Heels greater than an inch are best avoided as the foot tends to slide down the shoe squashing the toes into the toe box of the shoe. Silicone spacers or bunion cushions may help but can widen the foot further, making shoe wear more difficult.

## When would we consider surgery?

If the patient has tried the above measures but the foot still hurts on a daily basis or if the patient develops a hammer 2nd toe.

## What does surgery entail?

By the time a patient presents to their GP, the deformity is usually advanced and the metatarsal needs to be broken and reset so that the foot is narrower and of a more natural shape. For a moderate deformity, the bone is broken (osteotomy) close to the metatarsal head, using a chevron shaped bone cut. More advanced deformities need correction closer to the apex of the deformity at the base of the metatarsal. The scarf osteotomy is a popular osteotomy that runs the length of the metatarsal. If the joint is very arthritic then fusion procedure may be necessary.

The Keller's procedure, the operation we would have heard of as medical students in which part of the proximal phalanx is removed, is now of historic interest only.

## Is the operation painful and slow to recover from?

No. This is one area where we have made drastic progress. The main reason bunion surgery was painful in the past was that bones were held with plaster only allowing grating from the cut bone ends and a chance that the fixation could be lost. We now use small screws and specialist bone cuts to ensure solid fixation of the bone. This allows earlier weight-bearing and movement in the toes, ensuring faster rehabilitation and a better long-term outcome. In surgery, the use of selective ankle nerve blocks with marcaine numbs the toes, minimising initial post-operative pain. Within 2 weeks, patients are usually walking in soft sandals or trainers (See Figure 2a, 2b).



Figure: 1a and 1b - Hallux Valgus deformity. From the radiograph it is apparent that the metatarsals are splaying apart. The medial bump is not just an exostoses but a prominent metatarsal head.



Figure: 2a and 2b - Post-operative radiograph of a patient who has had a scarf osteotomy. She is only 4 weeks from surgery but has already returned to full-time hairdressing.