

# Vasu Pai MS, MCh, FRACS

# **Bunions or Hallux Valgus**



Hallux valgus is a condition that affects the joint at the base of the big toe.

The condition is commonly called a **bunion**.

The bunion actually refers to the bump that grows on the side of the first MTP joint. In reality, the condition is much more complex than a simple bump

Interestingly, this condition almost never occurs in cultures that do not wear shoes.

Pointed shoes, such as high heels and cowboy boots, can contribute to the development of hallux valgus. Wide shoes, with plenty of room for the toes, lessen the chances of developing the deformity and help reduce the irritation on the bunion if you already have one.

## What part of the foot is affected?

Hallux is the medical term for big toe, and valgus is an anatomic term that means the deformity goes in a direction away from the midline of the body. So in hallux valgus the big toe begins to point towards the outside of the foot. As this condition worsens, other changes occur in the foot that increase the problem.

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.

## How to recognise this problem?

Most of the symptoms that develop over time are because the skin and soft tissue are caught between the hard bone on the inside and the hard shoe on the outside.

Prominence, or bump over the base of the great toe

Skin over the bunion responds to constant rubbing and pressure by forming a callus.

The soft tissues underneath the skin respond to the constant pressure and rubbing by growing thicker.

Both the thick callus and the thick soft tissues under the callus are irritated and painful. The answer to decreasing the pain is to remove the pressure.

The severe hallux valgus deformity is also distressing to many and becomes a cosmetic problem.

### **Treatment**

The pressure can be reduced from the outside by changing the pressure from the shoes [wide shoes].

The pressure can be reduced from the inside by surgically removing any bony prominence.

Finding appropriate shoe wear can become difficult, especially for women who want to be fashionable but have difficulty tolerating fashionable shoe wear.

Finally, increasing deformity begins to displace the second toe upward and may create a situation where the second toe is constantly rubbing on the shoe.

X-rays will probably be suggested. This allows your doctor to measure several important angles made by the bones of the feet.

.

### What can be done for the condition?

#### **Nonsurgical Treatment**

Adapting shoe wear to fit the foot.

Wide forefoot (or toe box) may arrest the progression of the deformity.

#### Surgery

Well over 100 surgical procedures exist to treat hallux valgus.

The basic considerations for hallux valgus are

- 1) to remove the bunion
- " 2)to realign the bones that make up the big toe
- 3)to balance the muscles around the joint so the deformity does not return

For any foot surgery it is important to keep leg elevated over the pillows for 4-6 days

#### 1. Chevron osteotomy

The far end of the metatarsal bone is cut and moved laterally (called a distal osteotomy).

This effectively reduces the angle between the first and second metatarsal bones.

This type of procedure usually requires one or two small incisions in the foot.

Once the surgeon is satisfied with the position of the bones, the osteotomy is held in the desired position with one, or several, metal pins or screws.

## 2. Wilson's osteotomy:

The metatarsal bone is cut obliquely and is displaced to correct the angle

Simple and popular method

Needs plaster supplement for 6 weeks

You will probably need crutches briefly after surgery

During your follow-up visits, X-rays will probably be taken so that the surgeon can follow the healing of the bones and determine how much correction has been achieved.

## **Complications**

- 1. Under or over correction [quite evident immediately after surgery
- 2. 1-2% chance of infection requiring antibiotics
- 3. Recurrence of deformity
- 4. Forefoot pain
- 5. Numbness around the scar
- 6. Dissatisfaction

# 3. MTP Joint fusion

When pain is the issue and arthritis of the MTP joint is the problem, fusion of the joint is indicated It has to be noted once fusion done, patient cannot wear shoes with different heal. Success rate fusion is 95%

2