

Bunion/hallux valgus. Bone correcting surgery

What is this factsheet about?

An operation to correct a deformity of the big toe called a bunion or hallux valgus

- a summary of the condition
- the operation (with YouTube links)
- the main aim behind the surgery
- things you need to know
- general information
- how patients felt after surgery and relative risks
- Additional information and disclaimer

The condition

Official names: Hallux valgus, hallux abducto-valgus, hallux valgo-rigidus, subluxation of the first metatarso-phalangeal joint

The big toe joint deforms, deviating outwardly by greater than 15 degrees and can cross over other toes causing pain in and around the joint or cause discomfort in other toes or the ball of the foot. It can affect shoe wear fit and comfort and impacts walking and hobbies. **Non-surgical options** – toe splint, bunion pad, modifications to shoes, injection in the joint if inflamed using steroid, inlay to help ball of the foot. There are no known non-surgical cures for the deformity.

The operation

Common names: Osteotomy often named – Chevron (or Austin), Scarf, Reverdin, Youngswick, Akin closing wedge but there are over 150 operations for the same condition. The **Scarf osteotomy** is popular. It provides a shorter recovery time than many procedures and is stable. The Chevron osteotomy named after Austin is performed further forwards as a **capital osteotomy**

- Earliest surgery probably late 19th century by cutting the bone and making the toe align better
- Power blades remove the side bump (and top bump where required)
- A cut is made either at the toe (capital) end, e.g. Chevron, middle of the bone called the metatarsal, e.g. scarf or sometimes but less common at the base end of the metatarsal
- A second (wedge) cut may be made in the toe bone (phalanx) to correct the toe further ([Akin](#))
- Once the bone is moved into a new position and the toe straightens, internal screws are used to correct the bone. Screws remain in the foot and are not usually affected at airports
- Plaster casts are rarely used today, and many favour walker boots
- Day surgery and local anaesthetic are accepted modes of performing surgery
- Alternative surgery– arthrodesis to the big toe joint or base metatarsal (Lapidus) associated with damage within joints.

Aim of surgery

- The primary operation attempts to preserve the joint cartilage, straighten the toe, relieve pain and create as much movement as possible in the joint
- To provide enough movement to allow better function than beforehand
- Improve footwear selection and comfort
- An osteotomy is more commonly selected in female patients over arthrodesis (stiffening) unless the joint is irreparable

Things you need to know

The operation is performed by qualified podiatrists (podiatric surgeons) and is probably the most common operation performed on feet. Ensure you know the alternatives available.

1. Normal joint movement after surgery may be reduced from 6 months - 3 years. ([Information sheet 109](#)) and may remain limited after this period. Movement depends on the damage found to the joint at surgery
2. The toe may be slightly shorter and stick up for several months due to swelling.
3. Swelling can arise beyond 4 months (2-3%)
4. Transfer pressure (metatarsalgia) can arise in 2 % of cases and require an insole temporarily or permanently.
5. Numbness risk form 1% chance but usually improves over 12 months
6. Scar line pain 1-2% and delayed healing 2-3½%
7. Failure including allergy to metal less than 2%.
8. Infections vary between suspected at (2-3 %). Proven infection is low at less than 1%.

General data

Size of data = 18704 episodes of care. **Benchmark patient satisfaction score** = 70. College score average = 86.3. These are not percentage scores. Scores for surgery of this nature are marked down because of the delay in returning to footwear. Only simple surgery consistently reaches (90-100). **Return to footwear** (*taken as a closed in shoe*) 6-8 weeks = 84%, by 3 months = 87%, by 6 months = 90%

How patients felt about their surgery

Aims met for patients

87% complete satisfaction, and in part = 10%. Where patients not helped by this surgery = 2%.

Patients willing to repeat the experience

93% YES and 5% NO

Pain after surgery

Excellent = 33%, some discomfort but coped = 59%, poor pain control = 7%

About your condition now

Better or much better = 93%. About the same = 2%. A little worse = 2%. Deteriorated = 1%

Discomfort now (after 6 months)

No problems at all = 27%. Occasional or when standing for long periods = 48%. When standing only = 10%. At rest = 5%.

Problems after surgery

No problems at all = 81%. Minor (e.g dressing problem or wound) = 28%. Major problem (extended care or infections) 3%.

Relative risks

A [negative impact score](#) is graded 1-5, where 1-3 is common with most scores often recorded around 3 if they occur. A risk may be high but have a low impact or effect on recovery. A low risk might be rare, but it can significantly affect recovery and later life if it happens.

1= minimal effect of risk, 2= slight risk minor effect on recovery, 3 = moderate but correctable more inconvenience, 4 = notable with impact on recovery, 5 = significant with long term & permanent effects

For the osteotomies carried out at the head or middle of the bone, 68% had no problems, and most issues were minor. Level 4 and 5 were significant and recorded between 4% (level 4) and 0.03% (level 5) high impact risk.

High Impact scores for this surgery Level 4 = 4%, Level 5 = 0.03%.

High impact scores will include failed and repeated surgery. Complex pain (0.5%) can be distressing and resist treatment leading to disability. Blood clot (0.2%) requires warfarin and six months of treatment. Other types of clot include pooled blood in the wound (0.2%) with possible urgent reoperation. The cases relating to level 5 have not been conclusively shown but may include loss of toes or limb.

Further information & disclaimer

This factsheet is free and has been independently written and updated by a former [podiatric surgeon](#) without sponsorship. Data collected up to 2018.

Surgery is not risk-free, no matter how well performed. Do not consider surgery without understanding other options. **ConsultingFootPain** aims to provide free impartial information to a broader readership interested in foot health. This fact sheet provides links to further information. **ConsultingFootPain** factsheets do not replace the advice offered by your consultant or specialist; neither are they intended to replace correct consenting before surgical management or replace additional information your specialist may offer.

[Numerical data](#) has been gathered from the College of Podiatry and is one of two professional U.K providers for foot surgery. PASCOM-10 is a national database for podiatry and was commissioned originally in 2000 and is wholly owned and administered by the College of Podiatry.

Website consultingfootpain.co.uk for further information on foot health problems.

Resources

Useful websites include: Royal College of Podiatry <https://www.scpod.org/>, British Orthopaedic Foot & Ankle Society <https://www.bofas.org.uk/>

National Institute for Health Care and excellence [NICE guidelines can be viewed by patients on bunions](#)

NHS Choices <https://www.nhs.uk/pages/home.aspx>
www.footeducation.com

