

Bunion. 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 u-tube 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 on walking and hobbies. **Non surgical options** – toe splint, bunion pad, modifications to shoes, injection in joint if inflamed using steroid, inlay to help ball of 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. [Scarf osteotomy](#) is the most common osteotomy because of good recovery time and correction ability 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 bone and making toe align better
- The side bump (and top bump where required) is removed by power blades
- 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 make sure the bone stays corrected. Screws remain in the foot and are not usually affected at airports
- Plaster casts are used rarely 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 in feet. Ensure you know the alternatives available.

1. Normal joint movement after surgery may be reduced from 6 months - 3 years and may still remain limited after this period. Movement depends on 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 return to footwear is considered. Only simple surgery can be expected to consistently reach (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 if occurs can have a significant effect on recovery and later life.

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 problems were minor. Level 4 and 5 were significant and have been 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%.

This will include failed and repeated surgery. Complex pain (0.5%) which 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

Data relied upon in this factsheet was based on PASCOP up to 2018. For the latest report (2020) you can go www.pascom-10.com pages 13-15 as part of open access from the Royal College of Podiatry

