Stiff toesand surgery

Factsheet 3:Joint replacement

Information booklets from **ConsultingFootPain** published by BPCC Ltd 2018



# **What is this factsheet about?**

* 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

PLEASE NOTE

Real time film shown on hyperlink clicks (blue) and may not appeal to all viewers.

## **The condition**

Official names: Hallux rigidus and hallux valgo-rigidus, arthropathy of the first metatarso-phalangeal joint

The big toe joint becomes stiff and painful and won’t bend upwards. Hard bony projections on the side and/or top of the joint make shoes more difficult to wear. This is often due to an old injury, or associated with a bunion ([E-factsheet 1](http://rptest.co.uk/footpain/wp-content/uploads/2018/08/Bunion-joint-fact-sheet-No.1-2018.docx)) or rather rarer, gouty arthritis. Non surgical options – stiff sole shoe, insole aimed to rock off the toe rather than use it

## **The operation**

### **Alternative names: new joint, replacement arthroplasty, prosthetic joint**

* Established by Alfred Swanson a U.S hand surgeon in 1972.
* The arthritic joint is removed 0.13 min film [silicone hinge](https://www.youtube.com/watch?v=i1WqTit2_no) replaces the joint
* More detail around 4.58 mins US source [Primus design plastic](https://www.youtube.com/watch?v=QfLoIMKeL0M).
* Materials: plastic (silicone), metal or a mixture of both. Single or double ended
* Removal of the damaged edges is kept to a minimum, removed by power
* Metal grommets maybe shaped to fit into the toe which helps prolong the life of the implant.
* Average time for operation approx. 45 mins. Local or general anaesthetic suited.
* Day surgery accepted. Good pain control for most
* Alternative surgery– arthrodesis, resurfacing of cartilage or ‘Keller’ excisional arthroplasty

## **Aim of surgery**

* To remove joint pain and bulky deformity due to degeneration i.e loss of cartilage
* To provide enough movement to allow better function than beforehand
* Improve footwear selection
* More commonly selected in female patients over arthrodesis (stiffening)
* Indications ([NICE](https://www.nice.org.uk/guidance/ipg140)) Osteoarthritis and rheumatoid arthritis commonly affect the metatarsophalangeal (MTP) **joint** at the base of the big **toe.**

NICE guidelines can be viewed by patients. [Interventional procedure overview - Metatarsal phalangeal joint replacement of the hallux](http://www.nice.org.uk/nicemedia/live/11188/31441/31441.pdf)
24 May 2005 [www.nice.org.uk](http://www.nice.org.uk)

## **Things you need to know**

The operation performed by podiatric surgeons is twenty-three times less frequent than bunion corrections. Ensure you know the alternatives available.

1. Only 25% have normal movement after surgery because of existing damage. (see [Factsheet 109](http://rptest.co.uk/footpain/the-bunion-hallux-valgus-deformity-number-one/)).
2. Loss of ground purchase contact may occur in 50% of cases with loss in power less than ½ % chance and 5% chance of rigid stiffness.
3. The toe may be slightly shorted and sticks up for several months due to swelling.
4. Swelling beyond 4 months 2-3%
5. Transfer pressure (metatarsalgia) can arise in 2-4 % of cases and require an insole temporarily or permanently.
6. Numbness risk around 4% chance but usually improves over 12 months
7. Scar line pain 0.7% and delayed healing 4%
8. Failure including allergy to metal or plastic (worst case scenario amputation of toe).
9. Infections vary between suspected at (2.7-5%). Proven infection is low at 1.8%.

# **General data**

Size of data = 1424 episodes of care. Missing data arises where patient failed to answer question.

**Benchmark patient satisfaction score** = 70. College score average = 85

Scores for surgery of this nature are marked down because return to footwear is considered. Only simple surgery can be expected to reach consistent 90-100). These are not percentage scores

**Return to footwear** (*taken as a closed in shoe*)

6-8 weeks = 76%, by 3 months = 87%, by 6 months = 94%

## **How patients felt about their surgery**

**Aims met for patients**

80% complete satisfaction, and in part = 14%. Where patients not helped by this surgery = 5%.

**Patients willing to repeat the experience**

93% yes and 5% no.

**Pain after surgery**

Excellent = 35%, some discomfort but coped = 58%, poor pain control = 7%

**About your condition now**

Better or much better = 88%. About the same = 5%. A little worse = 2%. Deteriorated = 3%

**Discomfort now (after 6 months)**

No problems at all = 27%. Occasional or when standing for long periods = 58%. When standing only = 12%. At rest = 10%.

**Problems after surgery**

No problems at all = 67%. Minor (e.g dressing problem or wound) = 28%. Major problem (extended care or infections) 3%.

## **Relative risks**

Note that risk does not provide you with any [indication of impact](http://rptest.co.uk/footpain/wp-content/uploads/2018/08/Risks-and-Impact-fact-sheet-2018.docx). A negative impact score is graded 1-5 where 1-3 is common with most scores often recorded around 3 if they occur. For the implant toe surgery 56-69% have no problems and most are minor. Level 4 and 5 are significant and have been recorded between 1.7 – 3.7% high impact risk. **There were no level 5 scores** reported in this data.

## **High Impact scores for this surgery (level 4)**

Failed surgery needing repeat. Amputation of both great toes because of allergy. 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.

# **Further information & disclaimer**

This is a free factsheet and has been independently written and updated by a former [podiatric surgeon](http://consultingfootpain.co.uk/) without sponsorship.

Surgery is not risk free no matter how well performed. Do not consider surgery without understand other options. **ConsultingFootPain** aims to provide free impartial information to a wide reader interested in foot health. This fact sheet provides links to other information.

**ConsultingFootPain** factsheets do not replace 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](https://www.pascom-10.com/information-resources) 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.

Please sign-up to my website [consultingfootpain.co.uk](http://consultingfootpain.co.uk/). for further information on foot health problems.

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

National Institute for Health Care and excellence<https://www.nice.org.uk/guidance/ipg140>

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

