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Orthopaedic Hospital
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Information for patients

# Removal of Metalwork

# Foot and Ankle

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## What is metalwork used for?

Metalwork is used in orthopaedic surgery for a variety of reasons; these can include plates, screws, wires, rods and staples. They are made of either stainless steel or titanium, and may be internal (inside your body) or external (visible to you) e.g. metal rings surrounding your leg.

## Metalwork is used for the following operations:

- Joining of bones following removal of joint for arthritis allowing the bones to knit together (arthrodesis).
- Holding broken bones in position while they knit together.
- Correcting a deformity in bone i.e. a bunion (osteotomy).

The picture below is an example of metalwork inserted around an ankle joint following a fracture.

Once the bones have knitted together, the metalwork has in effect done its job. It is usually only removed if it causes you problems or if it interferes with a future operation and needs to be removed and healed prior to this, i.e. hip or knee replacement.

- To prevent bone overgrowing metalwork if you are still growing.
- To reduce pain or discomfort overlying the metalwork.
- To allow skin to heal if it has ulcerated from underlying prominent metalwork.
- To allow infection to settle down if surrounding metalwork.

Your surgeon has decided with your permission that your metalwork should be removed; this document will give you information on the risks and benefits to help you make an informed decision, however, if you have any further questions you should discuss them with your surgeon or other health care professional.



## Who do I contact if I am worried or have questions?

Jane Herbert Nurse practitioner/podiatrist on the Foot and Ankle help line: 01691 404202 leaving a message with your name, hospital number and contact number. Alternatively a call to the ward you were admitted to will be able to help.

## Where can I get more information?

British Orthopaedic Foot and Ankle Society (BOFAS)
www.bofas.org.uk
Offers a list of all surgeons carrying out specialist foot and ankle surgery across the UK as well as patient information.

Arthritis Research UK
www.arthritisresearchuk.org
Phone: 0300 790 0400
Offers a wide range of information and articles as well as a selection of self-help booklets which can be downloaded on the Internet.

National Rheumatoid Arthritis Society (NRAS)
www.nras.org.uk
Phone: 0845 458 3969
Helpline: 0800 298 7650
Email: enquires@nras.org.uk
Provides information and support for people with rheumatoid arthritis (RA) and juvenile idiopathic arthritis (JIA), their families, friends and carers.

Other useful links:
www.walktall.co.uk
www.cosyfeet.co.uk
www.diabetes.org.uk

If you have any comments on this leaflet please contact:
Mr Christopher Marquis
Foot and Ankle Unit
01691 404026
tracyoliver@nhs.net

## Recovery from your operation

This operation is normally carried out as a day case and therefore you should be able to go home the same day. Once the healthcare tem are happy that you are fully recovered and the circulation to your feet is good you will be discharged.

You are strongly advised to take your pain relief as prescribed and to elevate your leg(s) as much as possible. Swelling is normal and some discolouration in the toes is also normal.

If you have any concerns you should have been given a contact helpline telephone number for advice.

## Normal activities

For the first week or two you should rest and elevate your leg(s) as much as possible, you should not work or drive until advised by a health care professional.

It can take several months to completely recover from your operation; you may experience permanent aching or discomfort following removal of metalwork which may be due to your original injury.

If this continues it may be necessary to have further investigations or treatment.

## Conclusion

Metalwork is used extensively in orthopaedic surgery to fix bones together; leaving metalwork inside generally does you no harm.

Once your bones have healed your surgeon may recommend its removal to help reduce or prevent problems it may cause.

Removing metalwork is usually safe and effective, however, complications can happen and these will have been discussed with you prior to your operation so that you are fully aware and therefore make an informed decision to go ahead with the surgery.



## Are there any alternatives to surgery?

If pain is the issue then that can be controlled with adequate regular painkillers, relieving pressure over the prominent metalwork will also help.

If infection is the issue, it can be treated with antibiotics; however, the only long term solution would be to remove the metalwork to allow the infection to settle down.

## If I decide not to have surgery what will happen?

If the metalwork is left in place it does not normally give you any bother, however, metalwork can occasionally break and fragments may move around and cause problems.

If an infection is present surrounding metalwork, it may damage surrounding tissues and skin and may also make you feel ill.

## What is involved with the surgery?

As with any operation a number of checks are carried out by a healthcare worker to determine the correct side is being operated on. You can confirm this yourself when asked by any member of the team including your surgeon.

There are a variety of anaesthetics available today and these will be discussed with you either by your surgeon or anaesthetist. Depending on how much metalwork is removed and here from will dictate how you will be managed following your surgery and also the length of the operation. Your surgeon will usually remove the metalwork through the same incision.

You will have a wool and crepe bandage applied to cover your wound, you will be supplied with a wooden soled sandal to walk around in or a special boot.

The surgery can take between half an hour to one and a half hours depending on what is to be removed and which part of the body is involved. Small wires and screws can be hard to find and may also be covered in bone if they have been in for a long time, occasionally x rays are required to locate metalwork to assist in its removal.  Your skin is closed with either stitches or clips.

## Medication and your operation

It is usual for you to attend a pre-operative assessment clinic within a few weeks before your operation once a decision has been reached by yourself and your surgeon that surgery is the best option for you.

A very thorough assessment is carried out to ensure you are fit for your anaesthetic and operation. Any medications that you take will be discussed with you so that if any of these have to be stopped prior to your operation you will know which ones they are, i.e. Warfarin, Clopidogrel, HRT, Oral contraceptive pill and various medications to control Rheumatoid disease. Once this process is complete and you are happy to proceed, your surgeon will complete a consent form and invite you to sign and date that document.

## Risks and complications of surgery

All surgery carries potential risks, whilst the healthcare professionals will make your operation as safe as possible, there will be some patients who will have complications.

Some of these can be serious and can even cause death, these risks will be discussed with you at some stage prior to your operation so that you are fully aware as part of the informed consent process.

## Is there anything I can do to increase the success of this operation?

Smoking seriously affects bone healing cells so that the wound and bones are less likely to heal; it increases  also your chance of post anaesthetic chest infection, you are strongly advised to give up or at least cut down drastically to help reduce this.

If you are overweight this has implications for your anaesthetic and puts excessive loading on your feet.



## General Risks and complications of surgery

- **Pain varies a lot in different patients:** you will be given pain relieving medication to take home with you. The best advice is to elevate your leg as much as possible to reduce swelling and to take your medication as prescribed without missing any doses.
- **Bleeding:** this may be noticeable through your dressings.
- **Nerve damage:** damage to nerves may lead to numbness or permanent pain if it gets caught up in scar tissue.
- **Unsightly scars:** if the same incision is used to remove your metalwork there is an increased risk of skin tethering or scarring.
- **Blood clots:** these may form in your lower leg (Deep vein thrombosis -DVT) or may travel to your lungs causing a Pulmonary embolus (–PE). (Risk; 1 in 1,000), If you are at risk you will normally be prescribed an anti-clotting agent to help protect you from this. If you develop pain, swelling or redness in your leg or the surface veins appear larger than usual you may have a DVT and should seek advice straightaway. If you feel pain in your chest or back and become breathless, you may have a clot in your lungs and should call for an ambulance urgently or go straight to an Accident/Emergency unit informing them of your symptoms and that you have had recent surgery.
- **Infection:** if you get an infection it usually affects the skin only (Risk: 1 in 50) and may require regular dressing changes and antibiotics.
- **Failure of removing all metalwork:** Occasionally it may be necessary to leave some metalwork inside, this may be due to damaged metalwork, broken screw heads or simply too much bone overlying the metal work which could weaken it if vigorous attempts are used to remove it.
- **Weakening of the bone:** this can lead to a fracture (break) during or after the operation. If this happens you may need another operation.
- **Severe pain, stiffness and loss of use of the foot and ankle:** (complex regional pain syndrome) (risk 1 in 20). The cause of this is unknown. If it happens, you will need further treatment involving physiotherapy and painkillers.