

# OS27 Removing Metalwork

Expires end of March 2024

If you have any questions or concerns about your care, please contact the nurse in charge at the hospital.

You can get more information locally from:

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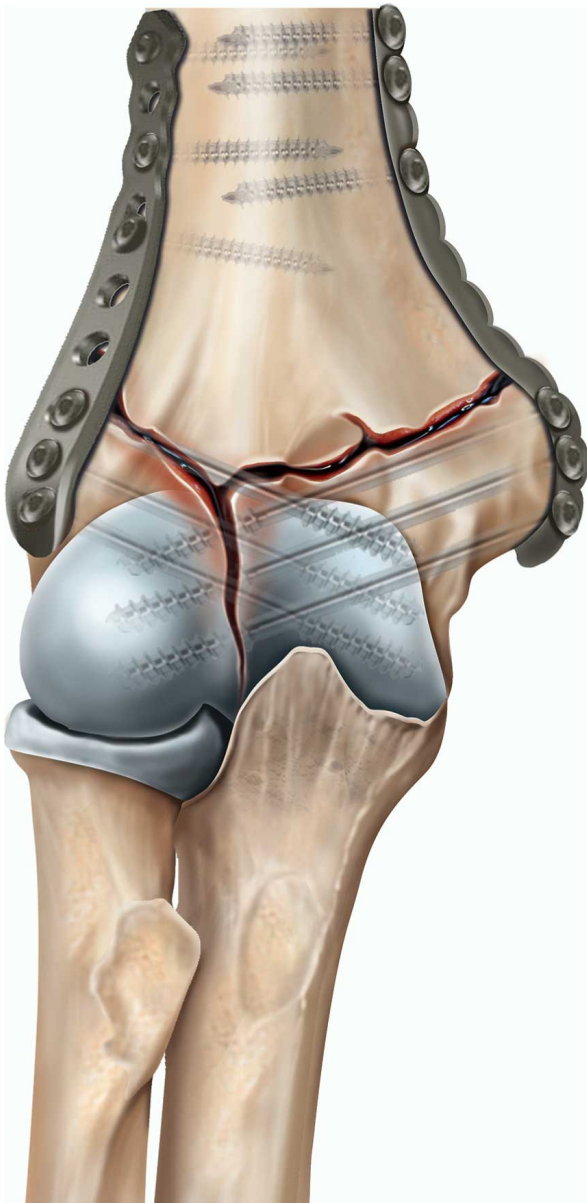


UNITED KINGDOM

## What is metalwork used for?

Metalwork includes plates, screws, rods and wires. These are specially made from stainless steel or titanium for the following operations on bones.

- Fixing a broken bone in position while it heals.
- Joining bones to remove an arthritic joint (arthrodesis).
- Changing the shape of a bone (osteotomy).



Plates fixed to the bone with screws

Once your bone has fully healed, the metalwork has done its job.

Your surgeon has suggested an operation to remove the metalwork. However, it is your

decision to go ahead with the operation or not. This document will give you information about the benefits and risks to help you to make an informed decision.

If you have any questions that this document does not answer, it is important that you ask your surgeon or the healthcare team. Once all your questions have been answered and you feel ready to go ahead with the procedure, you will be asked to sign the informed consent form. This is the final step in the decision-making process. However, you can still change your mind at any point.

## What are the benefits of surgery?

The following are the main reasons for having your metalwork removed.

- To reduce any pain or discomfort from the metalwork.
- To help treat an infection around the metalwork.
- To stop the metalwork from disappearing inside the bone, if you are still growing.
- To stop the metalwork from getting in the way if you need another operation later.

## Are there any alternatives to surgery?

Pain or discomfort from your metalwork can sometimes be helped by taking painkillers, avoiding pressure over the metalwork and keeping warm when the weather is cold.

If you have an infection around the metalwork, you can sometimes keep it under control by taking antibiotics. However, it is not usually possible to cure an infection without removing the metalwork.

## What will happen if I decide not to have the operation?

Even if the metalwork causes discomfort, it is usually safe to leave it in place. In very rare cases small pieces of wire have been known to move around the body and cause problems.

If you have an infection around the metalwork, it can damage the bone and soft tissues. Sometimes an infection can make you ill.

## What does the operation involve?

The healthcare team will carry out a number of checks to make sure you have the operation you came in for and on the correct side. You can help by confirming to your surgeon and the healthcare team your name and the operation you are having.

Various anaesthetic techniques are possible. Your anaesthetist will discuss the options with you. You may also have injections of local anaesthetic to help with the pain after the operation.

You may be given antibiotics during the operation to reduce the risk of infection. The operation usually takes 30 minutes to an hour.

Your surgeon will usually remove the metalwork through the same cut used to put it in. Small screws or wires can sometimes be hard to find and your surgeon may need to use a larger cut and x-rays. Even larger pieces of metalwork can be hard to find and remove if they are covered with scar tissue or bone.

Your surgeon will close your skin with stitches or clips.

## What should I do about my medication?

Make sure your healthcare team knows about all the medication you take and follow their advice. This includes all blood-thinning medication as well as herbal and complementary remedies, dietary supplements, and medication you can buy over the counter.

## How can I prepare myself for the operation?

If you smoke, stopping smoking now may reduce your risk of developing complications and will improve your long-term health.

Try to maintain a healthy weight. You have a higher risk of developing complications if you are overweight. Regular exercise should help to prepare you for the operation, help you to recover and improve your long-term health. Before you start exercising, ask the healthcare team or your GP for advice.

You can reduce your risk of infection in a surgical wound.

- In the week before the operation, do not shave or wax the area where a cut is likely to be made.
- Try to have a bath or shower either the day before or on the day of the operation.
- Keep warm around the time of the operation. Let the healthcare team know if you feel cold.
- If you are diabetic, keep your blood sugar levels under control around the time of your procedure.

Speak to the healthcare team about any vaccinations you might need to reduce your risk of serious illness while you recover. When you come into hospital, practise hand washing and wear a face covering when asked.

## What complications can happen?

The healthcare team will try to reduce the risk of complications.

Any numbers which relate to risk are from studies of people who have had this operation. Your doctor may be able to tell you if the risk of a complication is higher or lower for you.

Some complications can be serious and can even cause death.

You should ask your doctor if there is anything you do not understand.

Your anaesthetist will be able to discuss with you the possible complications of having an anaesthetic.

## General complications of any operation

- Bleeding during or after the operation. You may need a blood transfusion.
- Infection of the surgical site (wound). It is usually safe to shower after 2 days but you should check with the healthcare team. Keep your wound dry and covered. Let the healthcare team know if you get a high temperature, notice pus in your wound, or if your wound becomes red, sore or painful. An infection usually settles with antibiotics but you may need special dressings and your wound may take some time to heal. In some

cases another operation might be needed. Do not take antibiotics unless you are told you need them.

- Allergic reaction to the equipment, materials or medication. The healthcare team is trained to detect and treat any reactions that might happen. Let your doctor know if you have any allergies or if you have reacted to any medication or tests in the past.
- Difficulty passing urine. You may need a catheter (tube) in your bladder for 1 to 2 days.
- Blood clot in your leg (deep-vein thrombosis – DVT). This can cause pain, swelling or redness in your leg, or the veins near the surface of your leg to appear larger than normal. The healthcare team will assess your risk. They will encourage you to get out of bed soon after the operation and may give you injections, medication, or inflatable boots or special stockings to wear. Let the healthcare team know straight away if you think you might have a DVT.
- Blood clot in your lung (pulmonary embolus), if a blood clot moves through your bloodstream to your lungs. Let the healthcare team know straight away if you become short of breath, feel pain in your chest or upper back, or if you cough up blood. If you are at home, call an ambulance or go immediately to your nearest Emergency department.
- Chest infection. Your risk will be lower if you have stopped smoking and you are free of Covid-19 (coronavirus) symptoms for at least 7 weeks before the operation.

### Specific complications of this operation

- Failure to remove all metalwork, if the metalwork is damaged, completely buried or fixed too firmly in the bone.
- Damage to nerves nearby, leading to weakness, numbness or pain. This usually gets better but may be permanent.
- Weakening of the bone. This can lead to a fracture (break) during or after the operation. You may need another operation.
- Severe pain, stiffness and loss of use of your arm or leg (complex regional pain syndrome

- CRPS). The cause is not known. You may need further treatment including painkillers and physiotherapy. It can take months or years to improve. Sometimes there is permanent pain and stiffness.

### Consequences of this procedure

- Pain. The healthcare team will give you medication to control the pain and it is important that you take it as you are told so you can move about as advised.
- Unsightly scarring of your skin. A scar can sometimes be worse after it is cut open a second time.

### How soon will I recover?

#### In hospital

After the operation you will be transferred to the recovery area and then to the ward. Keep your arm or leg raised so that the swelling settles.

The healthcare team will check your blood circulation and monitor any bleeding or swelling. If you had an infection around the metalwork, you may need more treatment.

Your surgeon will tell you how much you can use your arm or leg. The physiotherapist will help you to walk safely. You may need crutches or a walking frame.

Keep your wound dry for 4 to 5 days, and use a waterproof dressing when you have a bath or shower.

The healthcare team will tell you if you need to have any stitches or clips removed, or dressings changed.

You should be able to go home the same day or the day after. However, your doctor may recommend that you stay a little longer.

If you are worried about anything, in hospital or at home, contact the healthcare team. They should be able to reassure you or identify and treat any complications.

#### Returning to normal activities

If you had sedation or a general anaesthetic and you do go home the same day:

- a responsible adult should take you home in a car or taxi and stay with you for at least 24 hours;
- you should be near a telephone in case of an emergency;
- do not drive, operate machinery or do any potentially dangerous activities (this includes cooking) for at least 24 hours and not until you have fully recovered feeling, movement and co-ordination; and
- do not sign legal documents or drink alcohol for at least 24 hours.

To reduce the risk of a blood clot, make sure you carefully follow the instructions of the healthcare team if you have been given medication or need to wear special stockings.

Spend most of the time during the first week with your arm or leg raised so that the swelling settles. After that you can usually start to be a little more active.

As you begin to move about more, remember to use any walking aids as you are told. For leg operations, your surgeon or physiotherapist will tell you when you can take weight. You may be given exercises to help get your joints moving.

Your surgeon will tell you when you can return to normal activities.

Do not drive until you can control your vehicle, including in an emergency, and always check your insurance policy and with the healthcare team.

## The future

It can take 6 months or longer to recover completely from surgery. Sometimes taking your metalwork out does not get rid of all your symptoms. You can get some permanent aching or discomfort caused by the original injury or operation.

If you still have as much pain or discomfort as you had before the operation, you may need more investigations or treatment.

## Summary

Metalwork is often used in operations to help bones to heal. Once your bones have healed, your surgeon may recommend removing the

metalwork to reduce or prevent any problems it may cause.

Surgery is usually safe and effective but complications can happen. You need to know about them to help you to make an informed decision about surgery. Knowing about them will also help to detect and treat any problems early.

[Keep this information document. Use it to help you if you need to talk to the healthcare team.](#)

[Some information, such as risk and complication statistics, is taken from global studies and/or databases. Please ask your surgeon or doctor for more information about the risks that are specific to you, and they may be able to tell you about any other suitable treatments options.](#)

[This document is intended for information purposes only and should not replace advice that your relevant healthcare team would give you.](#)

## Acknowledgements

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### Illustrator

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