

Removal of K wires

Information for patients, parents and guardians

With more severe fractures the bones can become misaligned or displaced (in the wrong position). Sometimes surgery is required to correct the position of the broken bone and K wires are used to keep the fracture stable until it heals. This factsheet will help you understand more about K wires and what your child can expect when surgery is needed. If you have any further questions your child's healthcare team will be happy to answer them.

What are K wires?

K wires, also known as Kirschner wires, are surgical wires that are used to hold a broken bone in a corrected position following surgery. The wires usually stick out of the skin so that they can be easily removed once the bone has healed. They are covered with padding and a plaster cast and your child will not be able to see or feel them. The wires are normally removed after about four to six weeks. For older children (usually over five years of age), the wires can be removed in clinic. Children under five years of age are usually admitted to hospital to have the wires removed under a general anaesthetic (medicine given to make them go to sleep). An x-ray may be needed to confirm that the bone has healed enough for the wires to be removed. We will discuss the removal method that's most suitable for your child with you.

Removal of K wires in clinic

It's important that your child understands what will happen during the procedure, so it's a good idea to talk to them about it advance, depending on their age and understanding. The following steps give an overview, but your child's healthcare team will explain further if required. The plaster cast will be removed in the plaster room. This does not hurt but the noise and vibration of the plaster saw can be alarming for young children. When the cast and dressing has been removed the wires can be seen sticking out of the skin. It helps to reassure your child in advance that this is normal. Entonox (gas and air) may be used for pain relief. The nurse will explain to your child how to use this and how it works. The sites around the wires are cleaned, before they are removed using special pliers. This procedure is quick and may feel strange, but is not usually too uncomfortable. The small wounds will bleed a little bit and dressings are placed over these. Usually another plaster cast is put on. The cast stays on for two more weeks.

Before you come to the clinic you may want to give your child some paracetamol in preparation for the procedure. Always follow the instructions on the packet. Sometimes it's not possible to remove the wires in clinic. If that is the case, a date will be arranged for you to bring your child back into hospital for the wires to be taken out under a general anaesthetic.

Removal of K wires under general anaesthetic

In young children the wires are taken out as a day case procedure. Your child will need a general anaesthetic for this but will not need to stay in hospital overnight. A letter will be sent to you confirming the date, time and location of the procedure. Your child will not be able to eat or drink for some time before they come into hospital and details of this will be included in the letter. After the wires have been taken out your child will go back to the ward. They will usually have another plaster cast, a splint or a bandage put on to support the limb for two more weeks. Your child will be able to go home the same day.

Possible complications

Your child's healthcare team will ensure their stay in hospital and the treatment they receive is as safe as possible. However, all medical procedures carry some risk and there is a possibility that complications might arise. You should ask the healthcare team if you would like any more information about complications, or if there is anything you do not understand. The anaesthetist will be able to discuss any possible complications of your child having an anaesthetic.

General complications of surgery

- **Bleeding:** this can happen during or after surgery.
- **Infection:** if the surgical wound becomes infected it will usually settle with antibiotics but may sometimes need further surgery.

- **Scarring of the skin:** this may occur as a result of the surgical cut.
- **Altered feeling at operation site:** this may be temporary or permanent.

Specific complications of surgery

- **Loss of position:** if the surgical correction slips and the ends of the bone go out of position, it could mean more surgery is needed.
- **The K wires become infected:** this is rare. If this occurs, the K wires will have to be taken out and antibiotics prescribed.
- **Surgical nerve injury:** there may be altered feeling at the operation site, this may be temporary or permanent.

Aftercare

Your child will be given an outpatient appointment within two weeks. The plaster cast will then be taken off and the limb checked. They will be shown exercises to get normal strength and movement back. Your child should not play any contact sports for a further four to six weeks.

If you have any questions or concerns please contact:

The nurse practitioners: **023 8120 4991**
or mobile: **07584 402438**

Ward G3: **023 8120 6486**

Your child's GP

If you need a translation of this document, an interpreter or a version in large print, Braille or on audiotape, please telephone **023 8120 4688** for help.

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