Broken bones in the lower arm

Information for patients, parents and guardians

There are two bones in the lower arm. They are the radius (on the thumb side) and the ulna (on the little finger side). Broken bones (fractures) in the lower arm are common childhood injuries. This factsheet explains the treatment and follow-up care that your child will have, and advises who contact if you have any further questions or concerns.

Signs and symptoms
Your child will complain of pain. The arm may look swollen, bruised and misshapen and they may complain of being unable to use it.

Investigations
An x-ray will be done to check the position and type of fracture. This helps the doctor decide the best treatment.

Treatment
The treatment depends on the type and position of the fracture. A general anaesthetic (a medicine that makes you go to sleep) may be needed to line up the bones into a good position. This is called a manipulation under anaesthetic. If a good position cannot be obtained by manipulation, or if the fracture is very unstable, then an operation is needed to internally fix the bones with surgical wires (K wires) or a flexible nail. If the operation is not done the bones will heal in a bent position, which may affect the use of the arm.

Treatment after surgery
A plaster cast will be applied. This may be a half or a whole plaster. A half plaster is called a back slab. After the operation it is important that your child’s arm is kept raised up on a pillow to keep swelling to a minimum. The nurses will check your child’s hand regularly for normal movement, colour and sensation. Encourage your child to move their fingers, straightening them out and bending them down, to reduce swelling and stiffness.

Pain relief medication will be given regularly to keep your child comfortable. Often an x-ray is taken the next day to check the position of the bones.

Metalwork used to secure the position of the bones will need to be removed:
• K wires are removed three to four weeks after surgery either in clinic or in theatre (please see separate leaflet).
• Flexible nails are removed a few months later in theatre under a general anaesthetic.

Going home
Your child will normally stay in hospital for between 24 and 48 hours, during which time their limb function and feeling will be observed. When these are normal and your child is comfortable, they will be able to go home.
At home

A sling or collar and cuff should be worn for one to two weeks. It’s important to get your child to exercise the shoulder muscles taking the arm out of the sling or collar and cuff six times a day. At night, rest the fractured arm up on a pillow. This prevents the fingers swelling.

A simple pain relieving medicine such as paracetamol may be needed during the first one to two weeks. It’s a good idea to give your child some pain relief before bedtime. Please follow the instructions on the bottle or packet.

An outpatient appointment will be booked for one week after leaving hospital, when an x-ray will be done to check the fracture position and healing. Sometimes the bone ends slip out of position and another anaesthetic is needed to reposition and hold the fracture. Your child should not go back to school while they have a half plaster cast on, or before their first outpatient appointment.

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.
- Bleeding can happen during or after surgery.
- If the surgical wound becomes infected it will usually settle with antibiotics but may sometimes need further surgery.
- Scarring of the skin may occur as a result of the surgical cut.
- There may be altered feeling at the operation site, this may be temporary or permanent.

Specific complications of surgery

- Loss of position: if the position of the bones slips, further surgical correction will be necessary.
- Non-union: when the bone does not heal. This is rare, but if it happens often requires further surgery.
- Compartment syndrome: this may happen because of swelling that affects the nerve and blood supply. This can be a complication of surgery but may also happen as a response to the injury.

If you have any questions or concerns please contact:

Nurse practitioners: 023 8120 4991 or mobile: 07584 402438
Switchboard: 023 8077 7222 bleep 2641
Ward G3: 023 8120 6486
Your 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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