

# Pin site and frame care

Information for patients with  
external fixator frames

## Why you need to look after pin sites

It is very important to look after your child's pin sites and external fixator frame to make sure your child's condition is successfully managed. Any complications with the pin sites or frame mean the treatment will be complicated, and your child might have to stop using the external fixator frame.

Before your child is discharged from the hospital, you will be shown how to look after the pin sites and frame. You will work with the medical team to learn how to do this, and complete a competency sheet.

The main thing to avoid is infection. Serious infections around the pins can allow bacteria in and, cause an infection in the bone (osteomyelitis).

Most pin site infections are caused by a particular bacteria called staph (staphylococcus aureus). This bacteria can live on skin harmlessly day to day, but can be dangerous if it gets into the body through broken skin.

**It is very important to keep the pin sites clean, so good handwashing before any pin site care is essential.**

### **Signs of an infected pin site**

Pin site infections must be quickly identified and treated. Signs of infection to look for are:

- redness
- swelling
- increased pain
- discharge, fluid or pus
- the limb being hot to touch
- the patient feeling unwell and has a fever (high temperature).

If any of these signs occur it is important to contact us **immediately** (contact the nurse specialist during working hours, or Savannah Ward out of hours). It will be important to increase the cleaning frequency to 2 or 3 times a day. This will help to remove any bacteria sitting on the skin around the pin. If there is no improvement after 24 hours, a swab from the affected pins might be needed to check for bacteria, and oral (by mouth) antibiotics might also be prescribed.

It is important to communicate with the medical team, who will support you and your child with any concerns (contact details at the end of this leaflet).

## How to clean you pin sites

Showering the frame and each pin site thoroughly, each day is often all that is needed to clean pin sites. Avoid sitting in a bath of water. Showering as normal when advised to by the medical team will be enough. The shower head should be used to concentrate water spray onto each pin site individually, starting at the top, and for a long enough time to help the gentle removal of any crusts.

When drying, do not rub the area, instead air dry.

If you cannot shower (because it is physically awkward or because of instructions from the medical team), please follow the instructions below.

## Equipment needed

- Handwashing facilities
- Clean plastic container containing boiled water (from a kettle) which **has cooled down**
- Cotton buds / gauze (they do not need to be sterile but should be kept in a clean environment)
- Plastic bag to discard any items used for cleaning.

It is also best to have your hair tied back and out of the way, and be bare below the elbow (roll up any long sleeves).

## Method

- Wash your hands thoroughly.
- Dip a clean cotton bud or some gauze into the water.
- Wipe the cotton bud or gauze around each pin site. Clean each pin site, one at a time. **Never** use the same cotton bud or gauze on more than one pin site.
- Gently wipe around the pin site following the natural circle shape. Avoid wiping in more than one direction as this can cause cross infection (moving bacteria from a dirty area to a clean area).
- You might need to use more than one cotton bud or gauze to clean one pin site - especially if there are stubborn crusts in place. Alternating wet and dry cotton buds or gauze can help this with stubborn crusts.
- Dry each pin site thoroughly.
- The external fixator frame can be cleaned using an antibacterial or antiseptic wipe.
- Leave the pin sites uncovered so they remain dry.
- Do not use any creams or lotions as they can make pin sites damp which encourages infection.
- The medical team might advise using pin site dressings. This will be discussed and demonstrated on the ward and will be part of your training if necessary.

## Dressings

Dressings around the pins are often called bolster dressings. They can be used to minimise the risk of soft tissue movement around the pin entry sites. Bolster dressings can improve comfort and lessen the chances of pin site infections for some patients.

There are different types of bolster dressing that can be used with external fixator frames. A decision will be made depending on the patient, type of pin site and skin appearance.

### Important information to know

- A bolster dressing can come in many forms. For example, an individually packaged item, a cut-to-size dressing, or a stacked pack of firm gauze.
- Any form of bolster dressing should be completely removed **before** completing pin site cleaning.
- No method or type of dressing is definite, and you might need more than one type. We might change the method throughout your child's treatment.
- You will be told by the orthopaedic team which dressing to use.
- The main job of the bolster dressing is to act as a barrier between the pin site and the constant movement of the surrounding skin/soft tissue.

## **Pain relief**

When pin sites are first cleaned, and until the surrounding skin is fully settled, it can be uncomfortable. It might be helpful to give some simple pain relief (such as paracetamol – please follow the instructions in the packet carefully) 30 to 45 minutes before the cleaning process.

Distraction can also help for younger patients or those who cannot clean it themselves.

## **Supplies of equipment**

Before leaving hospital the orthopaedic team will give you the necessary equipment and supplies.

These supplies will last a short time and then anything else will need to be obtained through your GP and local pharmacy. We will write to your GP to order everything needed on a repeat prescription.



## Contact us

If you have any questions or concerns, please contact us, Monday to Friday 9am-5pm.

Orthopaedic nurse specialist, **call:** 020 7188 7188, 07798 712107, or bleep 3129. To bleep the nurse, call the hospital switchboard, **tel:** 020 7188 7188 and ask for the bleep desk. Ask for bleep 3129 and wait for a response. This will connect you to the nurse directly. Outside of these hours please contact Savannah orthopaedics, **call:** 020 7188 5941 / 9204

For more information on conditions, procedures, treatments and services offered at our hospitals, please visit **web:** [www.evelinalondon.nhs.uk/leaflets](http://www.evelinalondon.nhs.uk/leaflets)

## Evelina London Medicines Helpline

If you have any questions or concerns about your child's medicines, please speak to the staff caring for them or contact our helpline, **tel:** 020 7188 3003, Monday to Friday, 10am to 5pm, **email:** [letstalkmedicines@gstt.nhs.uk](mailto:letstalkmedicines@gstt.nhs.uk)

## Pharmacy Medicines Helpline

If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline, **tel:** 020 7188 8748, Monday to Friday, 9am to 5pm, **email:** [mymedicines@gstt.nhs.uk](mailto:mymedicines@gstt.nhs.uk)



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