Nail bed injuries in children

This leaflet offers further information for parents of a child that has sustained a nail bed injury. It explains what a nail bed injury is, how it is treated and any associated risks. If you have any further questions or concerns, please speak to the doctor or nurse caring for you and your child.

What is a nail bed injury?
The nail bed is the tissue that sits between the fingernail or toenail and the underlying bone. This tissue helps the nail to grow normally and secures the nail plate to the fingertip or toe. Injury to the nail bed is very common in children, and occurs when the digits (fingers or toes) get crushed or trapped between or by heavy objects (caught in a closing door, for example). When the digits get crushed or trapped, the underlying nail bed can be damaged even if there is little evidence of this to the nail.

What are the signs of a nail bed injury?
The main signs of a nail bed injury are a loose nail or blood and/or bruising under nail. In some cases the nail may even be black. There may also be a laceration (tear or deep cut) to the fingertip.

How is a nail bed injury treated?
A short operation can be performed to repair the nail bed. This involves numbing the digit and removing the nail to allow access to the nail bed. Once the nail bed has been treated, the nail should re-grow as normal.

What are the benefits of nail bed repair?
Nail bed injuries can result in your child’s nail growing abnormally, so it is important to seek treatment. Nail bed repair usually helps to:

- reduce the pain experienced following the injury
- speed up the nail’s healing time
• reduce the risk of infection to the nail/digit
• reduce the likelihood of nail deformity.

Although treatment will reduce the likelihood of these complications, it cannot eliminate them completely. Your child’s surgeon can discuss this with you.

What are the risks associated with nail bed repair?
All surgeries carry the small risk of infection and adverse reaction to anaesthesia (if used). These complications are rare. There are also a number of potential risks that are specific to nail bed repair. These include:

• pain following surgery – this can be helped by painkillers and elevation of the limb to which the digit is attached
• bleeding – it is quite common for there to be a small amount of bleeding following the operation, however, if the dressing becomes soaked with blood, please seek professional advice, or attend your local A&E department
• abnormal or absent nail growth – the nail may not grow at all, may grow in two or more pieces, or may grow with ridges/marks on
• finger stiffness
• cold intolerance affecting the digit
• complex regional pain syndrome – a small number of patients (less than 5%) experience a severe pain reaction, and swelling, stiffness and increased sensitivity of the affected digit. This can be treated with medication.

Giving my consent (permission)
We want to involve you in decisions about your child’s care and treatment. If you decide to go ahead, you will be asked to sign a consent form. This states that you agree for your child to have the treatment and that you understand what it involves.

If you would like more information about our consent process, please speak to a member of staff caring for your child.

What will happen during the procedure?
The surgeon will inject a local anaesthetic to the injured area. This means that your child will be awake during the procedure, but will not feel any pain. If your child is very young (under seven years old) a general anaesthetic, which puts him/her to sleep for the entire operation, may be used.

Once the area is numb (or your child is asleep), the surgeon will remove the nail and examine the nail bed. He/she will clean the area thoroughly, and repair the bed using dissolving stitches if required. Any soft tissue or skin damage will also be repaired at this time. Finally a sterile dressing will be applied to cover your child’s finger/toe

You and your child will be able to go home on the day of the operation. If your child has had a general anaesthetic, he/she will need to remain in the hospital for a few hours to allow them time to wake up and recover from the anaesthetic.

Will my child feel any pain?
Due to the anaesthetic, your child will not feel any pain during the surgery, but may experience moderate pain following the surgery. Pain and swelling can be reduced by keeping the hand elevated as much as possible.
It is recommended that your child takes regular painkillers such as paracetamol and ibuprofen for one or two days after the surgery. If you require further advice, please speak to your doctor or call the Medicines Information Patient Helpline on 020 8725 1033 (9.30am to 5.30pm, Monday to Friday).

If your child has pain that cannot be controlled with regular painkillers, you should seek advice from your GP or contact the plastic surgery team through the hospital switchboard on 020 8725 1255.

**How should we care for the wound at home?**
It is important to keep the nail and the dressing dry until your child has been reviewed in clinic or at your GP surgery. Activities involving sand and grit are best avoided during this time, along with contact sports and similar activities.

**Will we need to attend a follow-up appointment?**
You and your child will be given an appointment for the dressing to be removed one to two weeks after surgery. This will either be in the dressing clinic at the hospital or at your GP surgery. At this appointment, the doctor will assess your child’s nail bed. If the wound has healed sufficiently, the area can be left exposed. If the wound has not healed properly, a much simpler dressing will applied until the area is completely stable. Your child will be able to return to normal activities following this appointment.

When the dressing is removed, you may find that the digit is still swollen. Often, at this stage, it does not look completely normal, and is a little lumpy and irregular. This is nothing to worry about. The area usually takes four to six weeks for to settle down, allowing for the healing tissues to readjust. A new nail can take between three to six months to regrow.

**Contact us**
If you have any questions or concerns about your child’s nail bed repair, please contact the ward or department you were discharged from. Alternatively, you can call the plastic surgery team through the hospital switchboard on 020 8725 1255 (Monday to Friday, 9am to 5pm).

**Additional services**

Patient Advice and Liaison Service (PALS)
PALS can offer you on-the-spot advice and information when you have comments or concerns about our services or the care you have received. You can visit the PALS office between 9am and 5pm, Monday to Friday in the main corridor between Grosvenor and Lanesborough Wing (near the lift foyer). **Tel:** 020 8725 2453  **Email:** pals@stgeorges.nhs.uk

NHS Choices
NHS Choices provides online information and guidance on all aspects of health and healthcare, to help you make decisions about your health.  **Web:** www.nhs.uk