



## **INFORMATION FOR PARENTS/CARERS OF CHILDREN HAVING INVESTIGATIONS IN RELATION TO UNEXPLAINED INJURIES**

### **Why are tests needed in this situation?**

NHS hospitals and their employees have a duty to protect children. When a concern is raised about an injury in a child, it is the responsibility of NHS staff to ensure it is properly investigated. The purpose of any investigation is to make sure that we do not miss any injuries or evidence of harm to a child. We recognise that this can be very upsetting for those with parental responsibility for the child, but we must put the welfare of the child as our top priority.

### **Would we not know already if the child had another injury?**

In babies and young children, injuries can be difficult to find. For example, bones can be broken without any obvious bruises, and bleeding on the surface of the brain can occur without any obvious injury being visible on the outside of the head. X-rays and scans can help us to identify these hidden injuries.

### **What X-rays and scans will be needed?**

A baby or young child will require a skeletal survey X-ray examination and a CT scan of the head. A skeletal survey takes place over two visits about two weeks apart. It is carried out by experienced radiographers who are skilled in dealing with children. A nurse or another healthcare professional will also be present during the examination to support you and your child.

***The first part of the skeletal survey:*** A skeletal survey is an X-ray examination of the whole body and will involve around twenty-five separate X-ray images. This can take up to an hour to perform. Your child will need to keep still for each image to be taken. The staff present will be the ones positioning your child for their examination and holding your child safely to keep still.

It is not unusual for children to become a little distressed or impatient during the examination. You will be able to comfort your child between X-ray images or you may wish for another familiar adult to be with your child.

The radiographers who perform the X-rays will not know the result. The images will be reported by a consultant radiologist, and will be discussed with you as soon as possible by the doctor looking after your child.

***The second part of the skeletal survey:*** Sometimes recent injuries are not visible immediately and will only be seen on images obtained later. The second part of the skeletal survey is, therefore, essential in order to avoid missing injuries in some children. Fewer images are needed on this second occasion, so it should take a shorter amount of time. You will be informed of the date of the appointment, which will be approximately two weeks after the initial X-rays.

This examination may be performed at Galloway Community Hospital for those living in the West of the region.

### **Should I bring anything?**

Although the examination is not painful, you may want to bring a comforter or their favourite toy. It is not unusual for a child to become upset during this examination as they are being held still for the x-rays. It is really useful if you bring their bottle with them to comfort them or for older children a drink and snack. Please bring a clean nappy for younger children as their nappy will need to be removed for the examination as it can produce an artefact on the image.

### **CT brain scan**

A CT scan is performed by experienced radiographers and produces images of the brain and the skull. The scan is relatively quick although your child will need to lie very still. Often the best way to do this is to allow the child to have a feed and drift off to sleep so the scan can be performed. The radiographer who carries out the scan will not know the result. The scan will be reported by the consultant radiologist, and you will be informed of the result as soon as possible by the paediatrician.

### **Can I stay with my child at all times?**

Those with parental responsibility may be able to stay with their child during the X-ray examinations; you will usually be asked to wait outside during the CT scan, but you will be able to settle your child first. If you stay during the X-rays, the radiographer will tell you where to stand/sit, and will ensure that you and your child are safe. You will not have to remain in the room if you do not want to do so, as there will be plenty of experienced and child-friendly staff available. Some parents prefer to come to the department and settle their child and return once the examination is completed.

### **Risks - Radiation**

Title: Information for Parent/Carers of Children Having Investigations in Relation to Unexplained Injuries

Author: Dr L Finlay / Louise Cox

Version: 1

Date: August 2018

Your child will not be exposed to any more X-rays and scans than is absolutely necessary to complete the examinations. Before any examination that uses radiation is carried out, the benefits and risks are assessed in order to ensure it is the best decision for each child. All X-ray doses are kept as low as possible.

We are all exposed to natural background radiation. This is made up of cosmic rays, radon, and also comes from some foods and from the ground. Every X-ray gives us a small amount of additional radiation.

The amount of x-rays we use in a skeletal survey is considered low dose and is equivalent to approximately one month of natural background radiation. A CT head scan is also considered low dose and is equivalent to 18 months' background radiation.

**For further information:**

NHS Choices – Radiation [www.nhs.uk/conditions/Radiation/Pages/Introduction.aspx](http://www.nhs.uk/conditions/Radiation/Pages/Introduction.aspx)

GOV UK – Radiation: risks from low levels of ionising radiation. 2008

You can also seek further information for your radiographer regarding the examination.