

## **Children requiring medical investigations**

Some children may require investigations for medical conditions which might account for the observed injuries e.g., inability to clot the blood normally, unusually fragile bones.

Babies with significant injuries always have investigations to look for additional injuries e.g., occult fractures, brain injury.

These investigations all take place within the hospital setting, according to agreed national and local protocols. Consent from parents (or social worker if child is under local authority care) specific to the investigations is always sought.

**Photographs:** Visible injuries – bruises, bites, burns etc. are photographed, images are stored on the hospital record.

**Blood tests:** If bruising is of concern, blood is taken to look for abnormalities of the blood clotting system. If fractures are of concern, blood tests are used to check vitamin D and calcium levels.

**Eye examination:** Babies under the age of one have an examination by an ophthalmologist to look for retinal haemorrhages. Eye drops are administered beforehand, to enlarge the pupils and improve the view of the retinae.

**Skeletal Survey:** Children under the age of two have a skeletal survey. X-rays are taken of all the bones – this involves more than 20 X-rays and takes up to two hours. Some children need to be sedated for this. It is not possible to do skeletal surveys at weekends/Bank Holidays.

An important part of the survey is the repeat views – a smaller number of X-Rays are taken two weeks later, because fractures in some bones e.g., ribs, limbs, can take some time to become obvious on Xray. The baby has usually been discharged from hospital before two weeks, the parent or carer and social worker are given the appointment prior to discharge, and in the event of non-attendance, the parent/carer/social worker will be contacted so that the baby is brought in for the test. The survey is not considered complete until these later X-Rays have been taken, and the additional report reviewed by the doctor concerned.

**Imaging of the brain:** All children under the age of one and a small number of older children have a CT scan of the brain. If it is abnormal, this may be followed by an MRI scan of the brain. An MRI requires sedation or anaesthetic.

The results of all the investigations are included in the medical report by the responsible Consultant.