

Ultrasound scans (USS) involves taking images of body parts using sound waves. USS's are painless, safe and are often performed in the NICU to look at the brain, kidneys, bladder, spine, hip and abdomen. This is identical to the ultrasound scans you would have had while pregnant.

Your baby's doctor will make the decision as to whether an ultrasound is necessary or would be helpful in making a diagnosis on your baby.

### Why does my baby need an USS?

#### Head USS

Premature babies under 31 weeks gestation and/or under 1500g usually have 1-3 ultrasound scans of their head to rule out brain complications of prematurity, for example bleeding, or injury to the white matter of the brain surrounding the ventricles. Scans are done routinely, usually within the first week to 10 days of life and again close to discharge from NICU (around 36/40 corrected gestational age). Scans may also be done between these 2 times, depending on how premature the baby was at delivery.

Your baby's doctor might also order a head ultrasound if your baby has:

- An abnormal increase in head size
- A bulging fontanelle
- A head injury
- Any brain symptoms

#### Renal/abdomen USS

Your baby's doctor might order a renal/abdominal ultrasound of your baby if there is a concern about certain types of kidney or bladder problems.

Sometimes these problems have already been detected on an ultrasound scan before your baby was born.

Renal ultrasound tests can show:

- The size of your baby's kidneys
- Signs of injury to your baby's kidneys
- Abnormalities of your baby's kidney, bladder, or the tubes leading into or out of the bladder

#### Spine/hip/peritoneal ultrasound scan

- If there is further investigation required of an antenatal finding.
- Congenital hip dysplasia.
- Any kind of lesion/mass/abscess near the spine.

#### Preparation for the USS

There is no specific preparation required for an USS although your baby will need to be kept calm.

The NICU has a portable ultrasound machine and the USS is performed at the bedside. The USS can be done in an incubator or in a cot.

A radiologist (a doctor specially trained in performing and interpreting ultrasound images) or technician trained in ultrasound imaging will spread clear, warm gel on your baby's head or body. This gel helps with the transmission of the sound waves. They will then apply a small transducer over the gel and the information will be seen on a small screen and analysed. The results go to your baby's doctor, who will discuss the results with you.

#### Risks

There are no known risks associated with USS.