

## Children's (Paediatric) Hip Ultrasound for DDH

### Consumer Information

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### What is a Children's (Paediatric) Hip Ultrasound for DDH?

A Paediatric Hip Ultrasound is an examination of the hip joints with an ultrasound machine that uses sound waves to form images of different parts of the child's body. The sound waves cannot be heard by the human ear and cannot be felt by the child having the ultrasound study.

A Paediatric Hip Ultrasound is used when a condition called DDH (Developmental Dysplasia of the Hip) is suspected or detected. DDH is a condition where the ball and socket of the hip joint do not form normally. In most cases DDH is detected soon after birth, but in some cases it is not apparent until the child is walking. When detected early, the condition is easier to treat and treatment is usually effective. DDH is harder to treat and has more problems when it is detected in older children. If left untreated it can cause problems with the hip joint in later life, sometimes limiting mobility or causing pain.

In very young children, a Hip Ultrasound is used to see whether the hip joints are forming normally or not and whether DDH is present. If the ultrasound is performed when the child is too young (before 5-6 weeks of age) or if the child has slightly delayed hip joint development, the ultrasound may appear abnormal but the joint may develop normally without treatment. It is important that the ultrasound findings are interpreted with the doctor's assessment of the stability of the hip joints when the hip joints are examined.

### How do I prepare my child for a Paediatric Hip Ultrasound for DDH?

There is no specific preparation for a Paediatric Hip Ultrasound study but your child will need to have his or her nappy and clothing removed to allow the ultrasound study to be performed.

### What happens during a Paediatric Hip Ultrasound for DDH?

A transducer (a small, smooth, hand held device), which converts electrical energy from the ultrasound machine computer to sound waves, is placed on the hip joint and moved gently back and forth over the skin to show the ball (femur) and socket (acetabulum) parts of the hip joint. The transducer

will be placed on both hip joints, to the left and right of the pelvis.

A clear gel is used to make the transducer contact closely with the skin and allow it to slide smoothly across the skin over the hip joint. The sound waves which are bounced back from the hip joint to the transducer are converted back to electrical energy, which is then analysed by the ultrasound machine computer to make an image or picture that can be seen on the video screen of the ultrasound machine.

Your child will be placed on his or her side or back on an ultrasound bed for the examination and the knee is usually bent during the scan.

### Are there any after effects of a Paediatric Hip Ultrasound for DDH?

The ultrasound waves used for diagnostic ultrasound examinations cannot be felt by humans and do not cause any harm.

The gel used in the study washes off in water and should not mark or stain clothing. It may dry as a white powder on your child's skin.

Your child will not feel any different before, during or after the test, and can return to school, kindergarten, or child care after the study provided there is no medical reason not to do so.

### How long does a Paediatric Hip Ultrasound for DDH take?

The time taken for the ultrasound varies with the age and level of cooperation of the child. However, it would usually take about 15-30 minutes including time for the person performing the study to check that the quality of the images is satisfactory.

### What are the risks of a Paediatric Hip Ultrasound for DDH?

A paediatric Hip Ultrasound study is a safe procedure which causes no harm. The ultrasound examination may not show any abnormality but sometimes the doctor can feel laxity (or looseness) of the joint and when this is the case it may require further investigation.

In older children where the hip joints cannot be seen well because the bones are too well developed an X-ray of the pelvis may be required.

### What are the benefits of a Paediatric Hip Ultrasound for DDH?

An ultrasound study is ideally suited to children as there are no potentially harmful X-rays and the ultrasound examination can be performed without the child having to be sedated or to hold completely still.

Ultrasound studies have no side effects and can usually show the cartilage of the immature hip joint very easily.

## Who does the Paediatric Hip Ultrasound for DDH?

Ultrasound examinations are performed by a **radiographer** (also known as a medical imaging technologist - MIT) or doctor who has undertaken special training in ultrasound. The radiographer is often called a **sonographer**, and a doctor who performs the ultrasound examination is sometimes referred to as a "sonologist". Other allied health professionals can also be trained to use ultrasound.

The images are usually obtained by the sonographer under the supervision of a **radiologist**. A radiologist is a specialist doctor trained to interpret the images and provide a report to your doctor. It is not uncommon for the radiologist to also examine your child or watch some of the images being taken.

Any doctor is allowed to use an ultrasound machine to assist in the investigation of clinical problems, but their use of an ultrasound machine will probably be limited to their special areas of interest.

## Where is a Paediatric Hip Ultrasound for DDH done?

Ultrasound examinations are usually performed in a private radiology practice or in a public or private hospital. Some doctors have their own ultrasound machine in their consulting rooms and may use it as a part of their examination of a patient.

## When can I expect the results of my child's Paediatric Hip Ultrasound for DDH?

The time that it takes your doctor to receive a written report on the test or procedure your child has had will vary, depending on:

- the urgency with which the result is needed
- the complexity of the examination
- whether more information is needed from your child's doctor before the examination can be interpreted by the radiologist
- whether your child has had previous x-rays or other medical imaging that needs to be

compared with this new test or procedure (this is commonly the case if your child has a disease or condition that is being followed to assess your progress)

- how the report is conveyed from the practice or hospital to your child's doctor (in other words, email, fax or mail)

Please feel free to ask the private practice, clinic, or hospital where your child is having their test or procedure, when your child's doctor is likely to have the written report.

It is important that you discuss the results with the doctor who referred your child, either in person or on the telephone, so that they can explain what the results mean for your child.

## Further information about Paediatric Hip Ultrasound for DDH:

A pelvis X-ray may be required in some circumstances in older children where the bones forming the hip joint are more developed and the hip joint cannot be seen well on the ultrasound images.

### Please note:

This information is of a general nature only and is not intended as a substitute for medical advice. It is designed to support, not replace, the relationship that exists between a patient and his/her doctor. It is recommended that any specific questions regarding your procedure be discussed with your family doctor or medical specialist

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