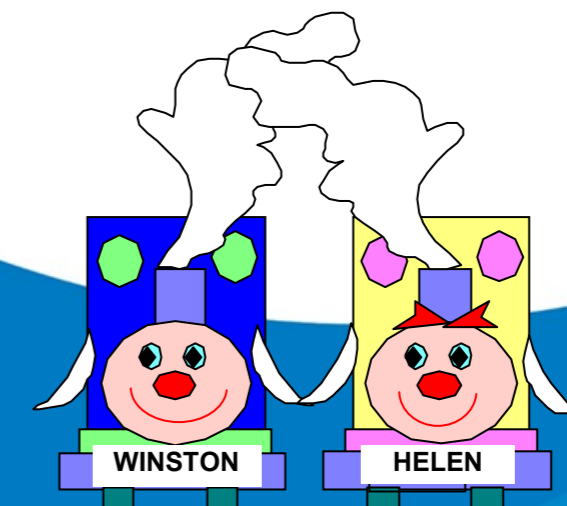


Growth Hormone Stimulation Test Clonidine / Arginine

This leaflet can be made available
in alternative languages / formats on request.

如有需要，本传单可提供其他语言/版式
此單張的其他語言/格式版本可按要求提供

Na żądanie ta ulotka może zostać udostępniona
w innych językach/formatkach.



If you have any further questions, please contact your child's consultant via their secretary via the hospital switchboard 0151 426 1600. The secretaries are available Monday to Friday 9.00am to 5.00pm

If you need to contact the department outside of these hours, please phone either:

Ward 3F 0151 430 1616

Ward 4F 0151 430 1791

Whiston Hospital
Warrington Road,
Prescot, Merseyside, L35 5DR
Telephone: 0151 426 1600

What is a Growth Hormone Stimulation Test?

This is a test to check the amount and production rate of growth hormone in your or your child's body. It helps to confirm or exclude a diagnosis of growth hormone deficiency responsible for growth failure for example short height.

What is Growth Hormone?

Growth hormone is produced by the pituitary gland which is a small gland located in the base of the brain, a few inches behind the bridge of the nose. Growth hormone has an effect on most tissues around the body to stimulate growth and development. Deficiency of growth hormone in children can lead to short stature and in small babies low blood glucose, small penis and or prolonged jaundice.

It also enables the body to prepare and respond to any stress such as severe infections, major trauma and surgery by way of regulating blood glucose levels. That's why it is one of the 'Fight and Flight' hormones.

Why do the test?

Random blood tests for growth hormone are rarely helpful in diagnosing or excluding growth hormone deficiency. Therefore, we use various drugs to stimulate the pituitary glands to see how much growth hormone is released. There are other causes of growth failure for example an under active thyroid gland, chronic illness like asthma, kidney and heart problems etc. Therefore it is always better to check that these conditions are not causing the growth failure.

How will the test be performed?

You or your child will be asked to attend Ward 4F at a suitable time and date. Your child will need to fast (have nothing to eat and drink except water after midnight the night before the test). Your child may bring any suitable activities books, toys, DVD etc. they may wish to play with during their stay in the hospital. Encourage your child to wear comfortable warm clothing. Arrange for your child to be excused from school.

On arrival at the hospital on the day of the test, the specialist nurse will introduce herself to you and explain what will happen during the test. During the test your child will be asked to lie flat for the duration of the test. Magic cream will be applied to an area on the hand or arm to help numb the skin. After a period of 20-30 minutes, the cream will be removed and a small plastic needle (cannula) will be inserted into a large vein.

The cannula will be left in place for the duration of the test to enable the nurse to collect blood samples at specific times. This is to prevent your child needing to have a needle inserted for each blood test. The specialist nurse will check your height and weight. An initial blood test will be taken to check the baseline level of growth hormone.

We will then give your child a drug (medication) either by mouth (usually Clonidine) or through the cannula into the vein (usually Arginine), which one will be decided by your doctor prior to the test. Normally we use Clonidine. Blood samples for growth hormone will be taken at 30, 60, 90 and 120 minutes after stimulation with the above named medication. However, timing of the blood samples is slightly more frequent if we have to use the Arginine.

The results of the blood tests will reflect how much your child's body reserves for growth hormone and how well your child's body can respond to the stimulation.

After the test

On completion of the test the cannula will be removed and your child will be able to have something to eat and drink prior to going home. If you are intending to send your child to school they should be excused from sporting activity for the remainder of the day.

Your doctor will be informed of the results of the test when they are available. The doctor will contact you with recommendations if required.

What are the benefits of the test?

The doctor looking after your child will have a greater understanding of the medical problem and thus the appropriate management can be initiated.

What are the risks and discomforts of the test?

The nurse conducting the test will ensure you are made as comfortable as possible. All discomfort will be minimised.

The most common side effect of the medication given for the test is tiredness and lowered blood pressure. Very rarely your child may have a reaction to the medication given. Rest assured you are in safe hands during your stay with us.

Consequences of not having the procedure?

The doctor looking after your child may not have the full medical information they need to treat your child's symptoms.