

Clonidine Stimulation Test

Introduction

Your child is scheduled to have a clonidine stimulation test. Clonidine is a medicine that causes the pituitary gland to secrete growth hormone. After taking the medicine, blood samples will be collected to measure how well the pituitary gland is working.

Indication

It is a screening test of growth hormone secretion.

Contraindication/ Precaution

Sick sinus syndrome

Risk and Complication

Clonidine will lower your child's blood pressure and he/ she may also experience drowsiness, dizziness and dry mouth. Therefore, it is important to keep your child rested in bed during the test as his/ her gait may be very unsteady. We will be observing your child closely and recording blood pressure regularly. If the blood pressure drops we may tilt the bed so your child is lying head downward – this is quite usual during this test.

Preparation

1. After midnight before the test, your child should not eat or drink anything except water. You will be told if your child is to stop taking any medications before the test.
2. The doctors will explain about the test in more detail, discuss any worries you may have and ask you to sign a form giving your consent (permission) for your child to have the test. If your child has any medical problems, particularly allergies, please tell the doctor. Please also bring along any medications your child is currently taking.

The Procedure

1. Before the test, an intravenous cannula will be inserted into a vein in your child's forearm or the dorsum (back) of the hand. (The cannula will allow blood samples to be taken without repeated needle sticks.)
2. At the beginning of the test, your child will be asked to swallow tablets containing clonidine. Clonidine will be absorbed from the stomach and travel through the bloodstream to the brain. Once in the brain, it will cause the pituitary gland to secrete growth hormone. At intervals during the test,

blood samples will be taken to measure growth hormone level.

3. The test lasts about 2-3 hours. Your child will not be allowed to eat anything during the test, and will only be allowed to drink water. It is important to follow these instructions, or the test will have to be stopped and repeated at another time.

After the Procedure

1. After the last blood sample, and if no other blood tests are needed, the intravenous cannula will be removed. Your child may then have food.
2. Your child will have to stay in bed until he/ she is no longer drowsy and the blood pressure has returned to normal. Nurses will monitor your child's blood pressure regularly, and it may take more than an hour before the blood pressure can return to normal. Your child may then resume usual activities.
3. Some children may feel 'wobbly' for the rest of the day. Your child should spend the rest of the day quietly and not participate in any sporting activities or operate machinery. He/ she should be encouraged to eat well at tea-time. He/ she should be back to normal by the following day.

When will the Result be Available?

It may take six to eight weeks for the laboratories to analyse blood samples. Your child's test results will be conveyed to you at the next outpatient appointment at the hospital. If growth hormone deficiency is suspected, we need to do another confirmatory test and neuroimaging before starting growth hormone treatment. However, if there is a need for your child to have further medical attention before the scheduled appointment, the hospital will contact you.

Remarks

The list of complications is not exhaustive and other unforeseen complications may occasionally occur. In special patient groups, the actual risk may be different. For any queries or further information, please consult our medical staff.