Growth Hormone Stimulation Testing

What you need to know...

Your child’s Growth Hormone Stimulation test will take place at the Children’s Hospital at Montefiore, on the 3rd floor.

Please arrive 15 minutes prior to your scheduled testing time to register.

Your child’s doctor has recommended a Growth Hormone (GH) Stimulation Test. This is a 3 hour test that begins in the morning.

WHY IS THIS TEST NEEDED IF BLOOD WAS ALREADY TAKEN?

- The purpose of this test is to see how your child’s own body’s pituitary gland makes growth hormone (GH). GH is not produced in a regular fashion throughout the day, but rather in pulses, and a random blood test is therefore not able to tell us if your child is making adequate GH. When your child has this test done, we will give your child one or two medications that stimulate his/her body to produce growth hormone. Then we measure this hormone at certain time points during the 3 hours.

HOW DO WE PREPARE FOR THE TEST?

- It is important that your child has nothing to eat or drink after bedtime the night before the test or in the morning of the test. The smallest amount of food/drink can give false results and the test will not be conducted. Please drink lots of water the morning of the test. Water is the only beverage that is allowed and we encourage it. Water helps your child feel better throughout the test and helps us with IV placement. If your child has a favorite distraction game or device, he/she is welcome to bring it along. We also have movies and games at the hospital.
WHAT EXACTLY CAN WE EXPECT?

- We will bring your child into the treatment room. Then, an IV catheter will be placed into your child’s vein and baseline bloods will be taken. We will then leave that catheter in and your child will be given a small pill (Clonidine) to swallow with water. This medication may affect your child’s blood pressure, so this will be monitored during the test. This first test requires 4 blood draws over 90 minutes where approximately 1 teaspoon of blood will be drawn at each time. At the 90 minute time point, a second medication (Arginine) will be given through the IV over about 30 minutes. After the infusion is finished 3 more blood samples will be drawn. Your child should not eat or drink anything except for water until the test is complete. Sometimes, your doctor may choose to do a different type of test called glucagon. This medication is given by injection and occasionally can cause nausea and vomiting.

WHAT SHOULD WE DO AFTER THE TEST?

- We encourage you to bring a light snack to eat when the test is over before leaving the hospital. We then recommend a light lunch afterwards. We would recommend that your child take it easy for the remainder of the day and not participate in any sports.

WHEN WILL THE RESULTS BE AVAILABLE?

- Please make sure that a follow up appointment has already been set up as per your child’s doctor’s recommendations at the last office visit. These test results usually take 1 to 2 weeks to return and the results can be discussed with the doctor by phone. If you do not hear from the doctor in this time, please call.

*These are intended to be general guidelines. If you have specific questions about your child, please ask your doctor.*

Any questions or need to schedule an appointment for a stimulation test? Call The Pediatric Endocrinology Department at (718) 920 - 4664