

Growth Hormone Stimulation Testing

About the Growth Hormone Stimulation Test

Your child's endocrinologist has decided to test the pituitary gland to see how it is secreting (producing) growth hormone. Too little secretion of growth hormone might cause short stature (height).

During the test, your child will receive medicine and then have blood tests drawn in order to measure blood levels of growth hormone. These measurements let the endocrinologist know whether the pituitary gland is able to make enough growth hormone. There are two medicines used in this testing. They are Arginine and Clonidine.

Preparing for the Test

It's important to talk with your child about what will happen the day of testing. Let your child know that the doctor is looking to see if his/her body is making hormones to help him/her grow.

On the Morning of the Test

- Your child should not have anything to eat or drink after midnight the day of the test. Eating or drinking can affect test results.
- Plan to set aside 6 to 8 hours for the testing.
- Wear comfortable clothing, preferably something with short sleeves or with sleeves that are easy to pull up.
- Don't forget to bring something for fun, such as books, quiet games, coloring books, stuffed animals, headphones or game boys. DVD players are available if your child would like to bring a favorite movie.

During the Test

- When your child arrives for the test, we will numb the skin near a good vein in the hand or arm. The topical medication numbs the area where the IV (intravenous) catheter (tube) will be placed.
- A very small needle or IV catheter will be placed into a vein in your child's hand or arm. This catheter will stay in place throughout the testing and will be used to take blood samples.
- Several blood samples will be taken. Your child's pituitary gland makes growth hormone in short bursts. By taking many different blood samples, the doctor hopes to get a spurt of growth hormone for the laboratory to measure.
- Nurses frequently check your child's blood pressure, heart rate and respiratory rate.
- We ask that a parent be with children during testing.
- After the IV catheter is in place, your child will get the IV medicine. The medicine stimulates the pituitary to release growth hormone into your child's blood.
- Blood samples will be taken every 15-30 minutes and at one-hour intervals. The lab will measure the amount of growth hormone in each sample. This will help the doctor know if your child's pituitary is making enough growth

hormone.

- Oral medicine will be given as part of the test and might make your child sleepy. This is normal.
- The medicine can cause lightheadedness. Make sure your child remains lying down after getting medicine.
- Please be sure to ask if you have any questions during testing.

After the Test

- It's OK for your child to have a drink and a snack before going home.
- It's normal for children to feel sleepy or drowsy. Your child should take it easy for the day.
- It might take 3 or 4 weeks to get test results from the lab. Your doctor will review the tests and let you know if there is anything that needs to be done.
- Please call your doctor if you have any questions before or after the test.

[Make An Appointment](#) [651-290-8707](#) [Refer a Patient](#) [651-325-2200](#)

This information is for educational purposes only. It is not intended to replace the advice of your health care providers. If you have any questions, talk with your doctor or others on your health care team.

If you are a Gillette patient with urgent questions or concerns, please contact Telehealth Nursing at [651-229-3890](#).