The doctor wants your child to have a Gonadotropin (GnRH) stimulation test. This test is being done to check how well the pituitary gland is working in children with puberty that is either early or delayed. If the pituitary gland is not working right, it may cause too little or too much sex hormone production. This could cause your child to have early or late sexual development.

Your child’s doctor has explained to you the reason for the test. Call the doctor or the doctor’s office if you have questions about the test.

**What will happen:**

- The test will be done in the T4D Infusion Clinic on the 4th floor of the Tower Building at Nationwide Children’s Hospital. Please take your child to the Crossroads Registration area on the 1st floor to register before coming to the clinic. For directions, see page 3.

- The nurse will start an intravenous (IV) line (Picture 1). The nurse can put numbing cream on your child’s skin before staring the IV to decrease the pain.

- The IV will be used to draw blood at the beginning of the test and at the end of the test.
• The nurse will give medicine called Leuprolide. This will be given as a shot in your child’s arm. Leuprolide makes the pituitary gland release LH and FSH. These cause the sex hormones (testosterone and estradiol) to be produced. LH and FSH cause the testes (boys) or ovaries (girls) to release sex hormones. These hormone levels may need to be drawn again 18 to 24 hours later.

• Your child should not feel any discomfort when the blood samples are drawn, since they will be drawn from the existing IV.

• When the test is over, the IV will be removed.

• Your child may need to return to a lab 24 hours later for a final blood draw to complete this test.

How to prepare:

• Explain the test to your child in a way he or she will understand at a time you feel is best.

• You do not need to do anything special to get ready for the test unless told to do so by the doctor. Be sure to tell the doctor if your child has any allergies.

• If your child has a fever or is sick, call the Infusion Clinic at 614-722-6077. The test will need to be rescheduled when your child is well.

• If your child is an infant, bring formula and comfort toys.

• For an older child, feel free to bring books, toys, or games to occupy your child during the test. We have a TV with a DVD player so you can bring a favorite movie.

• Your child should come to the infusion clinic dressed comfortably. If possible, have him or her wear a short-sleeved shirt.

• The test could take up to 4 hours to complete.

• Parents need to stay with their child during the test.

• Your child should not take any medicine before the test unless his or her doctor tells you the medicine may be given. You may bring the medicine with you to the test so it may be given when the test is finished.

Risks and possible problems:

This is a simple and safe test. Problems are rare, but they can happen. Possibilities include:

• Bleeding or bruising under the skin

• Bleeding at the spot where the IV was put in

• Fainting or feeling lightheaded

• Infection
After the test:

- Your child can eat regular foods.
- Your child will be able to go back to normal activities after the test.
- If your doctor orders an additional blood draw you will need to take your child to any Nationwide Children’s Lab 24 hours after the stimulation test. The Infusion Clinic nurse will let you know when this blood draw needs to happen.
- It takes 1 to 2 weeks for the test results to come back. When the report is ready, your child’s doctor will talk to you about the results and future plan.

Parent information for Crossroads registration

- **Crossroads registration** is on the main level near the Crossroads Welcome desk, between the Crossroads elevators and the Tower elevators. Follow the Blue Path to the Crossroads lobby where the Green Path meets the Blue Path.
- To get to the **Infusion Clinic**, take the Tower elevators (between Crossroads Registration and Urgent Care along the Blue Path). Go to level 4 and turn right into Suite D.

These three parking options are available

- Park in the **Hospital Garage on Children’s Drive (the blue parking garage)**. Enter the hospital, turn right and follow the Blue Path until it meets the Green Path at the Crossroads Registration Area.
- Park in the **Outpatient Care Garage on 18th Street (the orange parking garage)**. Enter the hospital and follow the Blue Path until it meets the Green Path at the Crossroads Registration Area.
- Use the **valet parking on Children’s Drive or 18th Street**. Enter the hospital and follow the Blue Path until it meets the Green Path at the Crossroads Registration Area.

If you have any questions, contact the Section of Endocrinology at 614-722-4425.