

WATER DEPRIVATION TEST

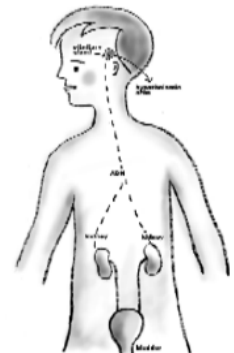
Your child has been drinking large amounts of water (polydipsia) and peeing large amounts of clear odourless urine (polyuria). Your child may even wake up in the night to drink and pee or wet the bed at night, which has not happened in a while. To help determine if there is an underlying medical cause, your doctor has ordered a water deprivation test.

What is Diabetes Insipidus (DI)?

DI is a condition in which the body cannot keep the correct amount of water in its system. The person loses too much water in the urine and then drinks large amounts to try to keep things in balance.

What is the cause of DI?

There are two types of DI: central DI (from the head) and nephrogenic DI (from the kidneys). Usually, a hormone called "vasopressin" or "anti-diuretic hormone" (ADH) controls the amount of water in the body. ADH acts in the kidneys to make them keep the right amount of water. With central DI, the body does not make enough ADH. With nephrogenic DI, the body can make ADH, but the kidney do not respond to the ADH as they should.



Is there any special preparation for this test?

This is a fasting test. Your child is not allowed to drink or eat (because there is some fluid in food) before and during the test. By starting the fast the night before, you do not have to spend as long in the testing room. Please follow below instructions for **fast start time/date**:

NO access to water, fluids or food after this time: _____

Where is the testing room?

Your child will be pre-registered by the clinic prior to the day of the test. Proceed directly to the testing room (Medical Investigation Facility, MIF), Room 2C30 in the Medical Day Unit (MDU) area of the old hospital (orange building), arriving at your scheduled time. Take the elevators nearest to the BC Children's Gift Shop to the second floor. Upon exiting the elevator turn left, then right, and follow the signs to MDU/MIF. Walk to the back to meet the clerk.

If your child is unable to keep this appointment, please notify the testing room at 604-875-3680 as soon as possible, so the room can be used for another patient.

What can we expect during the test?

- The testing room nurse will meet you, check your weight and vital signs, and get a urine sample from you.
- The nurse will insert an intravenous needle (IV). This IV is used to collect blood samples every 1-2 hours. If you are worried about the needle, you can ask the nurse for some numbing spray.
- Weight and vital signs are done every 1-2 hours, and urine is collected at the same time as the blood sample if possible.
- Your child will have access to a patient bed to rest between procedures. You may wish to bring books or other quiet activities (music, games) to help keep them distracted. The test can be quite uncomfortable and may seem unkind, as your child may be very thirsty but is not allowed to drink. This needs to occur to ensure we get the correct diagnosis.
- The doctor will be kept up to date with the results of the tests and determine how long the test will continue. The doctor may order ADH as a pill called "desmopressin" to see if your child is able to go longer without peeing as much and being so thirsty. The urine should decrease in amount and start to look more straw-yellow coloured.
- At the end of the test, your child will be provided with a drink and a snack. If your child is on a special diet, please bring a snack with you.

When will the doctor have the results?

It may take a few days for all the results to come back. The doctor will contact you with the results of the test.