

# *Vancouver Neuropituitary Program*

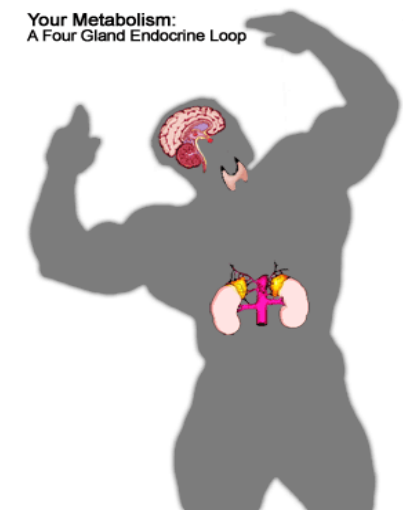


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Vancouver General Hospital, May, 2013.



## **Diabetes Insipidus Patient/Family Guide**

Also ask us for these materials:

- Transsphenoidal Surgery
- Endocrine links & support groups

If found please return to:

Neuropituitary Clinics:

Room 467, Comox Bldg, St. Paul's Hospital,  
Vancouver, BC

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Vancouver General Hospital (VGH)  
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Pituitary Nurse: Crystal Gagnon

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Pager: 604-252-4832

cgagnon2@providencehealth.bc.ca

## MedicAlert

You must wear a MedicAlert bracelet or tag that identifies you as having **Diabetes Insipidus- requiring DDAVP**. To order go to [www.IdentifyYourself.com](http://www.IdentifyYourself.com) or ask for an order form. You can also purchase a MedicAlert bracelet from a jewelry store. Be sure to ask your doctor what should be engraved onto the bracelet.



Call your doctor or nurse if you have side effects from the medications that were ordered for you. When you are at the Clinical Center, your physician, nurse, or pharmacist will discuss with you how the drugs work, how and when to take them, and their side effects. You may also want to refer to any written information they give you.

And of course, always feel free to ask your doctor or nurse any questions you have about your diagnosis and treatment.

My Contacts:

Doctors: \_\_\_\_\_ Endocrinologist

\_\_\_\_\_ Endocrinologist

\_\_\_\_\_ Neurosurgeon

\_\_\_\_\_ Radiation Oncologist

\_\_\_\_\_ Family Doctor

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Clinic Coordinator: \_\_\_\_\_

## **Diabetes Insipidus (DI)**

The pituitary gland is an organ the size of a pea at the base of the brain. It produces many hormones that travel throughout the body stimulating other glands to produce different types of hormones.

Antidiuretic hormone (ADH) or vasopressin from the hypothalamus is stored in the pituitary gland and helps regulate water balance in the body by controlling the amount of water the kidneys reabsorb. If there is too little ADH or the kidneys do not respond to ADH, then too much water is lost through the kidneys, the urine produced is more dilute than normal, and the blood becomes more concentrated. This can cause excessive thirst, frequent urination, dehydration, and high blood sodium (hyponatremia). If there is too much ADH, then water is retained, blood volume increases, and the person may experience nausea, headaches, disorientation, lethargy, and hyponatremia (called syndrome of inappropriate ADH).

## **What should I do while I am being treated for diabetes insipidus?**

It is important for you to remember these things while you are treated for diabetes insipidus:

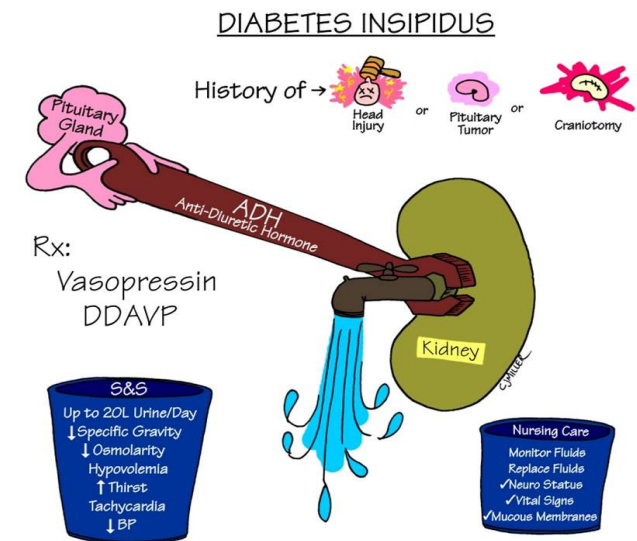
It is very important that you balance your water intake with your urinary output. However, it is also very important that you do not drink too much water. If you drink too much water, this could cause very serious side effects. This is the reason why it is so important for you and your physician to discuss a specific plan to meet your individual needs.

Call your doctor or nurse when you notice that you cannot balance your urinary output with your water intake. A sign of this imbalance is that you will urinate a large amount of clear, odorless fluid. After urination, you will be very thirsty and feel the need to drink a large amount of water.

will retain too much water and the sodium levels will drop in the blood. You may experience lethargy, confusion, nausea, and (in severe cases) seizures with low sodium levels.

**Nephrogenic DI:** A low salt diet to help reduce the amount of urine your kidneys make is usually prescribed. To avoid dehydration, drinking enough water is also important. The drug hydrochlorothiazide may also be given to increase urine output.

**Primary DI:** There is no specific treatment other than to decrease the amount of fluid intake and/or to treat the underlying mental illness.



## Types of DI

**Central DI:** This form of DI is usually caused by damage to the pituitary gland or hypothalamus due to surgery, a tumour, an illness (such as meningitis), inflammation, or a head injury. The damage disturbs the normal production, storage, and release of ADH.

**Nephrogenic DI:** This form of DI occurs when there is a defect in the kidney tubules (structures in your kidneys that allow water to be excreted or reabsorbed). This damage affects your kidneys ability to properly respond to ADH. This form of DI is usually caused by an inherited genetic disorder or a chronic kidney disorder.

**Primary polydipsia:** Also known as psychogenic polydipsia, is a form of DI that causes excretion of large volumes of dilute urine. The underlying cause is excessive intake of fluids, rather than being a problem with ADH production or damage. Prolonged excessive intake of water can damage the kidneys and suppress ADH, making your body unable to concentrate urine. It can also be caused by damage to the thirst-regulating mechanism in the hypothalamus or by a mental illness.



**I'm thirsty**

## How is DI diagnosed?

If your doctor suspects you may have DI, a fluid or water deprivation test may be used to determine whether you have DI as opposed to other causes of polydipsia or excessive thirst and intake of water.

In this test you will be required to forgo intake of water for a prolonged period of time (4-18 hours) to determine the cause of the thirst. During the test your body weight, urine output, and urine composition will be measured. If there is no change in the water loss despite fluid deprivation, desmopressin or DDAVP will be given to help distinguish between the two types of DI (central DI and nephrogenic DI).

## Treatment

**Central DI:** Frequently is corrected with temporary use of medication (desmopressin or DDAVP). In some cases, the damage can take longer to correct and you may need to continue medication for a longer period of time.

DDAVP may be taken nasally, intravenously, orally, or as a sublingual tablet (that melts under your tongue). DDAVP should be considered a medication you take as needed. This is because in most people the amount of ADH made by the body can vary from day to day. If you take too much DDAVP your body