

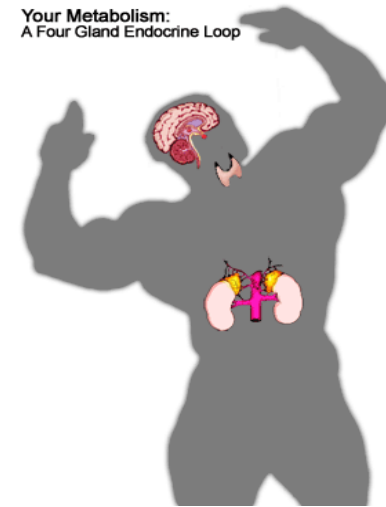
Vancouver Neuroendocrine Program



UBC Division of
Endocrinology
& Metabolism



Your Metabolism:
A Four Gland Endocrine Loop



*Adrenal Insufficiency
Patient/Family Guide*

Name:

Also ask us for these materials:

- *Medication guidelines & coverage*
- *Transsphenoidal Surgery*
- *Endocrine links & support groups*
- *Adrenal insufficiency travel letter*
- *Medical alert bracelet*
(www.Identifyyourself.com)

If found please return to:

Neuropituitary Clinics:

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

PH: (604) 806-9156

Fax: (604) 806-8594

Vancouver General Hospital (VGH)

*Gordon and Leslie Diamond Health Care Centre
2775 Laurel Street, Vancouver, B.C*

PH: 604.875.5929

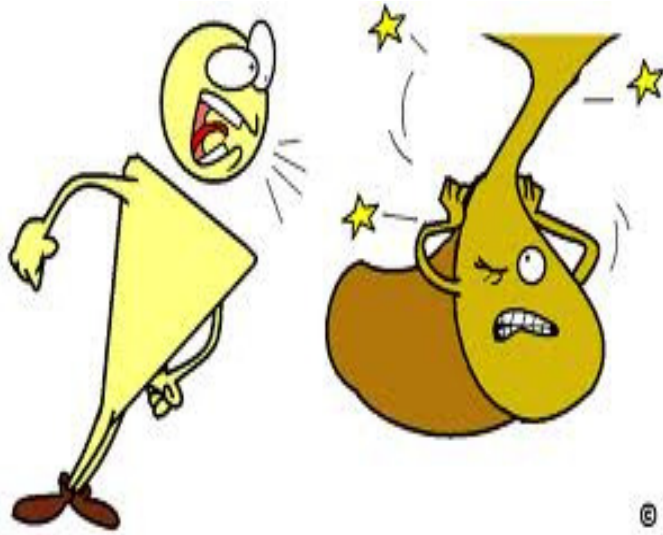
Fax: 604.875.5925

Pituitary Nurse: Crystal Gagnon

Ph: 604-682-2344 ext. 62413

Pager: 604-252-4832

cgagnon2@providencehealth.bc.ca



Supported by an educational grant from:



Prepared by:

Crystal Gagnon, RN BScN,
Pituitary Nurse at St. Paul's Hospital and
Vancouver General Hospital, June 2012.

My Contacts:

Doctors: _____ *Endocrinologist*

_____ *Endocrinologist*

_____ *Neurosurgeon*

_____ *Radiation Oncologist*

_____ *Family Doctor*

Nurse(s): Crystal Gagnon

Ph: 604-682-2344 ext. 62413

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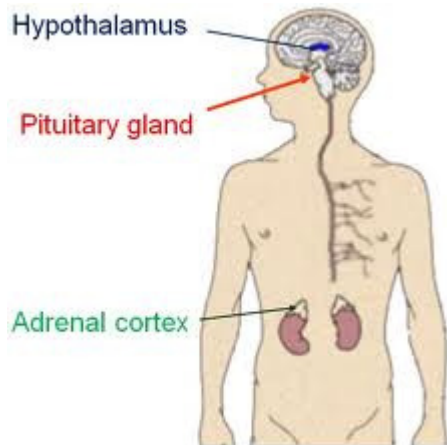
cgagnon2@providencehealth.bc.ca

Clinic Coordinator: _____

Adrenal Insufficiency

The Adrenal Glands

The body has 2 adrenal glands, one on top of each kidney. They secrete hormones needed for important bodily functions. These hormones include cortisol and aldosterone. The pituitary gland controls the release of cortisol through the hormone ACTH. Cortisol helps the body recover from infection and stress. Aldosterone helps maintain blood pressure and balances salt, potassium, and water in the body.



body becomes deficient in hormones such as cortisol. Damage from the pituitary tumour itself can also cause a deficiency in cortisol.

If your doctor decides that your cortisol deficiency is permanent, medication must be taken to maintain the right amount of cortisol in the body for the rest of your life.

Cortef Weaning:

When it is safe to do so, your doctor may allow you to reduce your dosage of Cortef. This must only be done in consultation with your doctor. If at any time while you are weaning off Cortef you feel unwell, please resume your full dose of Cortef and contact the Endocrinology Clinic.

Returning to Normal Dose

As soon as your illness is over and your symptoms are gone, you can return to your normal dose of medication.

MedicAlert

*You must wear a MedicAlert bracelet or tag that identifies you as being **Cortisol Deficient**. To order go to 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.*



Adrenal Insufficiency and Pituitary Tumours

Sometimes after treatments for an ACTH producing pituitary tumour, such as surgery, radiation treatment, or with certain medication used to lower cortisol levels (ketoconazole), the

Adrenal Insufficiency

Adrenal insufficiency occurs when the adrenal glands do not make enough adrenal hormones.

Permanent adrenal insufficiency can be caused by:

- *Addison's Disease (failure of the adrenal glands)*
- *Pituitary Tumours*
- *Surgical removal of the pituitary gland*
- *Surgical removal of the adrenal glands*
- *Congenital adrenal hyperplasia (CAH)*

Temporary adrenal insufficiency can be the result of:

- *Using steroid medications*
- *Surgery on the pituitary gland*
- *Surgery on the adrenal glands*
- *Medications that lower cortisol levels (ketoconazole)*

When adrenal insufficiency is permanent, medication must be taken for the rest of a patient's life.

Symptoms of Adrenal Insufficiency:

- *Unusual tiredness and weakness*
- *Dizziness when standing up*
- *Nausea, vomiting, diarrhea*
- *Loss of appetite*
- *Stomach ache*

11. Remove the cap from the needle. Hold the syringe like a dart.
12. Using your thumb and first 2 fingers, spread the skin while pushing down tightly.
13. Dart the needle into the thigh injection site, going straight in at a 90-degree angle.
14. Pull the syringe back to make sure no blood vessels have been punctured. If blood appears in the syringe, withdraw the syringe and discard it (however, if this is the only dose of medication you have, inject the medication anyway). Otherwise prepare another syringe with medication and inject into a slightly different site.
15. After injecting, place tissue or gauze near the needle, and pull the needle out quickly.
16. Massage the injection site gently.
17. Place the syringe and needle in a hard, unbreakable container (like an empty coffee can with a lid) before disposing of it.
18. Record the date, time, site of injection, and reason for injection in this record book. Be sure to follow up with your doctor.

- Diarrhea
- Flu
- Severe cold
- Any illness that interferes with normal functioning
- Dental procedures
- Major emotional stress like death of a loved one, funerals, or family illness

During these times you need to take DOUBLE the amount of cortisol medication you are taking.

Note: During times when you may not feel well because you are tired from physical or emotional stress, there is usually no need to increase your dosage. However, it is important to take your regularly prescribed dose. There is no harm taking too much cortisol for a short time if you are unsure.

Serious Illness

If you are too ill to take your pills, or if you cannot keep them down, you must take cortisol by injection. You and someone you live with should learn how to give this injection. If there is no one to help you give the injection and you live close to a hospital, you may go to the nearest hospital for the injection.

You will not cause harm by giving an injection of Solu-Cortef that later turned out to be unneeded. Missing a needed dose can be life-threatening. After giving the dose, go to the nearest emergency department or call your doctor or nurse.

High doses of Solu-Cortef are always needed in any stressful situations such as if you are having surgery, in a serious accident, or are hospitalized.

How to give a hydrocortisone injection

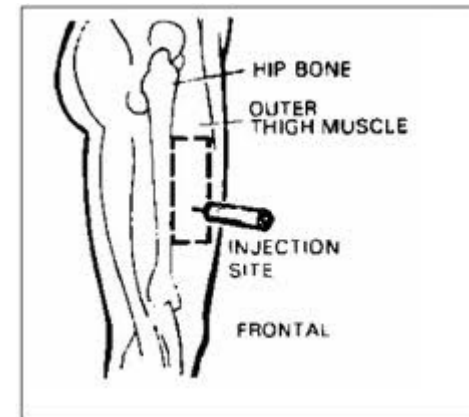
Supplies: Solu-cortef 100mg IM x 1 dose, 3mL syringe, 1 alcohol swab, 1 22G needle, 1 2x2 gauze

- 1. Wash your hands*
- 2. Assemble your supplies*
- 3. Mix the medication by pushing down on top of the vial to release the cork.*



- 4. Shake the vial to mix the medication solution well.*
- 5. Use alcohol to clean the rubber stopper on top of the vial.*

- 6. Take the cap off the syringe and insert the needle into the vial.*
- 7. Draw up the entire solution of medication (adults).*
- 8. Replace the needle cap.*
- 9. Select the site for your injection. Uncover your thigh and look at it. Draw an imaginary line in the middle of your thigh to divide it in half lengthwise. The outer portion is where you will be injecting. Now, imagine your thigh divided into three equal portions, from the knee to the hip. The outer portion of the inner third of your thigh is where you will be injecting.*



- 10. Use alcohol to cleanse the injection site on the skin.*