

## **You are booked to come in for a : GLUCAGON STRESS TEST (GST)**



### **What is a glucagon stress test?**

A glucagon stress test looks to see if your body is able to make enough of certain important hormones when it is under stress. A hormone is a chemical which is made in one part of the body but passes into the bloodstream and has effects on other parts of the body. When things are working normally, your pituitary gland (a small gland that lies just under the brain) produces a several hormones.

Two of these are:

- ACTH (adreno-cortico-trophic hormone) which stimulates your two adrenal glands (which sit just above the kidneys) to make cortisol. Cortisol is a steroid hormone and is vital for health. It has many functions which include:
  - helping to regulate blood pressure.
  - helping to regulate the immune system.
  - helping to balance the effect of insulin in regulating the blood sugar level.
  - helping the body to respond to stress.
- GH (Growth hormone) which has important effects on growth in childhood and influences adult body composition and the functioning of several body systems

The glucagon stress test is used to test how much ACTH and cortisol you can produce and how much growth hormone is available when your body is stressed. The 'stress' in the test is an injection of a hormone called glucagon.

### **How should I prepare for the test?**

You should fast overnight before the test, drinking only water from midnight. You should take your medications as usual the day before the test unless your doctor has advised you not to.

### **What will happen during the test?**

You should come to the ward on the date of the test, by 9am. You will have a bed to lie down in throughout the test. A cannula (a small needle with a tube attached for taking blood samples) will be placed in a vein in your arm. After your first blood test you will be given an injection of glucagon into the muscle of your upper arm or thigh. The injection may make you feel a little nauseated. You will have further blood tests taken at intervals from the cannula for 3 hours after this. Once the test is completed, the cannula will be removed and after you have had something to eat you will be able to go home.

### **What happens after the test?**

When the results of the blood tests are available they will be reviewed by the endocrinology team. You will be notified by letter and your GP will also be informed of the results. If there are any changes to be made to your treatment or further tests that need to be organized, these will be outlined in the letter or someone from the department may contact you by telephone.

### **What if I have any questions?**

You will see a doctor on the day of your test who should be able to answer your queries. If you have any questions before or after your test please leave a message and contact number with the endocrine department at the Hospital where your test is booked. Someone will call you back to discuss things.

