

## **Glucagon Stimulation Test**

### **Introduction**

This is a dynamic test to assess the pituitary reserve (function). It is performed by measuring the ability of the anterior pituitary gland to secrete growth hormone and ACTH in response to intramuscular injection of glucagon.

### **The Procedure**

- Patient is recumbent throughout the test.
- An intravenous cannula will be inserted before the test.
- At the time of the test, the patient will be given an intramuscular injection of glucagon. A total of **seven** blood samples to measure the cortisol, growth hormone and glucose levels will be taken from the IV cannula : before, and after the injection.
- Each blood sample requires about 6ml of blood.
- The whole procedure takes about 4 hours to complete.

### **Risk and Complication**

- Hypersensitivity reactions to the agent used in the test, such as rash, skin itchiness, breathing difficulty etc may occur, but these reactions are rare.
- Occasionally, nausea, vomiting, hypokalemia or palpitation may occur.

### **Before the Procedure**

- Stop taking any steroid, such as hydrocortisone and prednisolone, from the afternoon of the day before the test.
- Fasting is required from midnight of the day before and until the completion of the test.

### **After the Procedure**

- After completion of the test, the IV cannula will be removed and the patient can resume oral feeding.
- The nursing staff will check with the patient for any discomfort related to the examination and patient's vital signs, such as blood pressure, pulse and temperature.

### **Follow Up**

The patient can call the endocrine / diabetes center for enquiry if there is any query or discomfort in relation to the procedure shortly after discharge.

### **Remarks**

This is general information only and the list of complications is not exhaustive. Other unforeseen complications may occasionally occur. In special patient groups, the actual risk may be different. For further information please contact your doctor.