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GROWTH HORMONE TESTING

DEFICIENCY OF GROWTH HORMONE

Background: In normal individuals, GH (growth hormone) is produced by the pituitary gland, and it stimulates the liver to produce insulin-like growth hormone (IgF-1). A deficiency of GH may result in decreased muscle mass and an increased fat mass, an increased cholesterol, diminished bone density and an overall feeling of fatigue and depression. GH deficiency can occur following head trauma or due to a pituitary disorder. Most likely, your doctor has found that you have an abnormally low IgF-1 and are now scheduled for a more definitive test, called an Arginine/Growth Hormone Releasing Hormone (GHRH) stimulation test. An IV catheter will be placed. Blood will be drawn, then GHRH will be administered, followed by a 30-minute infusion of arginine. You may experience mild nausea, a metallic taste, flushing, or an urge to urinate. Blood will then be drawn from the catheter at timed intervals for up to 2-hours. A normal individual will achieve a peak growth hormone response greater than 9 ng/ml. Lower values may indicate growth hormone deficiency due to disease in the hypothalamus or pituitary.

You will be given a prescription for medication **GEREF (=Growth Hormone Releasing Hormone and R-Gene (Arginine))** in preparation for this test. The cost for Geref and Arginine may be covered under your prescription plan. Check with your pharmacy or insurance. Have the prescription filled then drop off the medication at this office two days prior to your scheduled test date. If your pharmacy can not order this medication, please contact our office so we can attempt to assist you in this process.

DO Not eat after midnight prior to your test. Drink plenty of water and wear a heavy sweatshirt to facilitate placement of the IV catheter. Hold all usual medications except blood pressure medications. Plan approximately 2 ½ hours for the test.

We will then schedule a follow-up appointment for you to review the results with your doctor seven to ten days later.

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PATIENT NAME:

DATE:

IV Catheter placed (patient to void first):

GHRH administered (1mcg/kg - slow IVP over 1-2 min):

Arginine Infusion administered (over 30 min – then draw 30 min GH):

IV Catheter removed:

ARGININE/GHRH STIMULATION TEST

<u>Time</u>	<u>Actual Time</u>	<u>BP</u>	<u>Pulse</u>	<u>Growth Hormone</u>	<u>Comments</u>
Baseline- 0					
+30 min					
+60 min					
+90 min					
+120 min					

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