

GLUCOSE TOLERANCE PROTOCOL (ORAL)

Patient Preparation:

1. Patient on a carbohydrate diet greater than 150 grams/day for 3 days before the test. Patient should otherwise be healthy and ambulatory for at least the previous 3 days.
2. Schedule with the Outpatient Lab (if not having test performed in the physician's office) at 791-2512 as soon as possible prior to the test. The glucose load as well as fasting and post dose samples will be managed by LMC's lab.
3. Patient NPO beginning at 10:00 p.m. (at least 8 hours but not more than 16 hours prior to start of test) the night before (except for ice chips and water).
4. If pregnant, use 50gm for screening. If 1hr glucose is >140mg/dl, a 3hr oral GTT with a 100gm glucose load may be ordered by the patient's physician.
5. Non-pregnant adults should receive a glucose load of 75gm (or 1.75g/kg up to no more than 75gm). Pediatric dosage dependent upon patient's weight and age.
6. After administration of the glucose load, a blood sample is drawn at 2hrs for glucose level testing.

Reference Ranges:

Fasting glucose: < 126 mg/dL

2hr post dose glucose: < 140mg/dl : Normoglycemia

140-199 mg/dl: Impaired glucose tolerance

>200 mg/dl : Indicates diabetes if confirmed on a subsequent day

Pregnant Patient:

Two or more of the following threshold values must be met or exceeded to confirm gestational diabetes:

Fasting glucose : < 92 mg/dl

1 hr glucose : <180 mg/dl

2 hr glucose: < 153 mg/dl

A woman only needs to have a single abnormal value to be diagnosed with gestational diabetes.

7. Testing for hypoglycemia:

Current recommendations for evaluation of suspected post-prandial hypoglycemia indicate that blood glucose levels should be determined at the time of symptoms if the episodes are sufficiently time-predictable.

The patient should be given a 100 gm glucose load or fed a high carbohydrate meal and observed and available for testing throughout the 5hr post-prandial period. A glucose level should be drawn and tested at onset of symptoms.

A documented glucose of <45mg/dL during a symptomatic episode confirms the diagnosis of hypoglycemia.

IMPORTANT NOTES

1. If a physician orders any other than standard schedule above, use the times as specified, or confer with the clinical pathologist if the schedule seems unusual.
2. Patient should not eat, smoke or chew gum during the test.
3. If patient becomes ill (vomits up the glucose load) during the test, notify the clinical pathologist or the patient's physician.
4. A fasting blood sample will be collected prior to administering glucose. A fasting baseline value greater than 126 mg/dl could indicate diabetes mellitus and should be confirmed by another collection of a fasting glucose at another date. Fasting baseline >126 mg/dl should eliminate need for the glucose tolerance testing. Notify the ordering physician of a baseline value equal to or greater than 126 mg/dl before administering the glucose load and continuing the test.

COMMENTS

Patient may continue to have water and ice chips during the procedure, and may be ambulatory, but activity should be held to a minimum.