ORAL GLUCOSE TOLERANCE TEST (VITROS GLUCOSIDES)

KEY POINT SUMMARY

Specimen volume: 10 ul of serum

Assay Time and Temperature: Approx. 5 mins, at 37°C

Intended Use: For quantitative measurement of glucose concentration in serum

PRINCIPLES OF PROCEDURE:

It is a dry, multilayered, analytical element coated on a polyester support.

A 10ul drop of patient sample is deposited on the slide where the spreading layer promotes the uniform distribution of the sample and permits an even penetration of solute molecules into the underlying reagent layers. The oxidation of sample glucose is catalyzed by glucose oxidize to form hydrogen peroxide in the presence of dye precursors to produce a dye. The intensity of the dye is measured by reflected light.

TEST TYPE: Colorimetric

WAVELENGTH: 540 nm

SPECIMEN REQUIREMENT:

1. Serum: Centrifuge specimens at 1000X g for ten minutes and remove serum from clot within 30 min. after collecting the specimen to avoid metabolism by cells (approx. 7% per hour a room temp.)

2. Storage requirements:
   a. Store at room temp. up to 24 hours b. Refrigerate up to 7 days
   c. Freeze at or below -18°C (0°F) for storage up to 1 year
SPECIAL PRECAUTION (Serum)
Particulate matter (i.e. fibrin) in sufficient quantity may coat the spreading layer and limit diffusion of oxygen, causing a negative interference. To minimize particulate matter, do not centrifuge specimens until clotting is complete.

SUPPLIES AND EQUIPMENT
Glucose Slide Cartridge Vitros
Calibrator Kit 1
Quality Control Materials – Vitros Performance Verifiers
Vitros 7% BSA for serum dilution

LIMITATIONS OF THE PROCEDURE:
1. Hemolysis causes a decrease in glucose results up to 10% in the presence of +3 hemolysis, equivalent to 250 mg/dL of Hemoglobin
2. Elevated lipids may limit diffusion of oxygen to the reactants. Dilute grossly lipemic samples two fold before analysis.

Instructions for the Collection of 2nd OGTT:
1. Patient must be in a fasting state (6-12 hours)
2. Extract blood for FBS
3. Patient must be given 75 gms or 50 gms glucose suspension (medic orange) or as per physicians instruction and must be consumed within 15 minutes.
4. The patient must be advised not to take anything (food or drinks) within the period after glucose suspension intake until the 2 consecutive extractions (one hour interval) is done.

Reference range : No normal value