



Effect of Meal on Blood Triglyceride Level

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ABSTRACT: This research paper is about to know the effect of Meal on Blood Triglyceride Level For this total 200 patients are studied with their blood sample. We asked them to come in 12 hours overnight fasting and give fasting blood sample for the measurement of Serum triglyceride Level. Then asked them to come 2 hours after taking meal as they eat in routine quantity.

Method used is standard End Point Assay Method for the measurement of Fasting Triglyceride and triglyceride level 2 Hours after meal. Our aim was to know the effect of meal on Triglyceride level.

The ultimate aim is to know how the meal affects the level of Blood Triglycerides.

Keywords:- Meal, Triglyceride, End Point, Pipettes, Biochemistry analyser.

I. INTRODUCTION :-

In this paper, Biochemistry autoanalyser is used to evaluate the serum Triglyceride level using Liquid triglyceride reagent of Standard company. For measurement 1000µl of Reagent is mixed with 10 µl of serum with standard pipettes.

Mixed Ready reagent keep at 37°C for 10 minutes incubation & after ten minutes using 510 filter serum Triglycerides level of all 200 patients were measured. It means there are total 400 sample of 200 patients, 200 samples are of fasting & 200 patient sample are of 2 Hours after meal. This study is carried out as in emergency cases Random sample for Triglyceride Level that is generally after meal Triglyceride is carried out to start treatment of Heart problems like Ischemic Heart Disease, Sudden Heart attack etc.

But when there is routine patient, what difference occurs in fasting value and value after 2 hours after meal.

Observation of the tests on 400 samples, that means 200 patients.

Sr. no.	Name of Patients	Fasting Triglyceride mg/dl	Triglyceride level 2 hours after meal, mg/dl
1	ABC	138	210
2	EFG	198	257
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1) Fasting value which is generally advised by the physician give less values and serum Triglyceride level after 2 hours of meal are high. So definitely dose of medicines is increased.

2) Due to higher values observed in the serum, the patient get excited and naturally physician has to give a little high dose of medicine for reducing the serum Triglyceride level.

Along with this study, it is for the observation is their any effect diabetes on serum Triglyceride levels, so that physician and diabetic patient will take the proper decision regarding doses and duration of medicines.

II. EXPERIMENTATION :-

1) All Blood samples are received in fasting conditions and after 2 hours of routine meal intake. Thus this test was performed two times in one patient, so total tests performed were 400.

2) This method is called as End Point Biochemistry method.

We take 1000 µl of reagent in labelled test tubes according to the convenience of the operator. In that test take 10 ul serum as mixed, test tube is shaken properly so that there should be proper mixing. The ready solution is kept for 10 minutes for incubation at 37^o c. After that value is taken by standard method of Biochemistry.

In the following manner reading and records are maintain

The period in which this study was conducted was 1st February 2020 to 30th July 2020. All the tests were performed by the single operator strictly.



199	IJK	110	165
200	XYZ	135	146.8

Interpretation of Test :- (Serum Triglyceride)

Normal range – 110 to 170 mg/dl

Borderline – 170 to less than 200 mg/dl

Increased level – more than 200 mg/dl

III. CONCLUSION :-

In 95 % cases of the study, postmeal value is raised by 15 to 20 % when compared with fasting value. What and when we take some food or meal affects the serum triglycerides level. If we performed serum of triglyceride test after 2 hours of after taking meal, it will get definitely increased.

So for standard method of doing exact value of serum Triglyceride should be performed or advised by the physician in 12 hours fasting condition. It is important for diagnosis and treatment part of patient.

Other thing, after meal increased Triglyceride level in a patient increase his or her anxiety, Triglyceride is food part, if excess in quality it stored deposited in the body which may result in obesity and increased waist size. This stored triglyceride is converted into energy, according to need of body.

Source of Patients:- Routinely visiting patients to my own pathology, well equipped and ISO certified laboratory.

Some of the advantages from the above results :-
For the accuracy of value of blood triglyceride level in the body and medicines prescribed by physician is made a standard format of treatment in Fasting Triglyceride level is considered.

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