LABORATORY REPORT

Redcliffe labs

Patient NAME	:		
DOB/Age/Gender	:	Report STATUS	:
Patient ID / UHID	:	Barcode NO	:
Referred BY	:	Sample Type	:
Sample Collected	:	Report Date	:

Test Description	Value(s)	Unit(s)	Reference Range

Advance Glucometabolic Profile

HbA1C (Glycosylated Haemoglobin)

Glycosylated Hemoglobin (HbA1c) *HPLC*	**9.6 H***	%	<5.7
Estimated Average Glucose	228.82	mg/dl	Refer Table Below

Interpretation:
Interpretation For HbA1c% As per American Diabetes Association (ADA)

Reference Group	HbA1c in %
Non diabetic adults >=18 years	<5.7
At risk (Prediabetes)	5.7 - 6.4
Diagnosing Diabetes	>= 6.5
Therapeutic goals for glycemic control	Age > 19 years Goal of therapy: < 7.0 Age < 19 years Goal of therapy: <7.5

Note:
1. Since HbA1c reflects long term fluctuations in the blood glucose concentration, a diabetic patient who is recently under good control may still have a high concentration of HbA1c. Converse is true for a diabetic previously under good control but now poorly controlled. 2. Target goals of < 7.0 % may be beneficial in patients with short duration of diabetes, long life expectancy and no significant cardiovascular disease. In patients with significant complications of diabetes, limited life expectancy or extensive co-morbid conditions, targeting a goal of < 7.0 % may not be appropriate

Comments :
HbA1c provides an index of average blood glucose levels over the past 8 - 12 weeks and is a much better indicator of long term glycemic control as compared to blood and urinary glucose determinations ADA criteria for correlation between HbA1c & Mean plasma glucose levels.

HbA1c(%)	Mean Plasma Glucose (mg/dL)	HbA1c(%)	Mean Plasma Glucose (mg/dL)
6	126	12	298
8	183	14	355
10	240	16	413

Note :- (H* - High , L* - Low ,CL* - Critical Low,CH* - Critical High)

S.Agarwal

Dr. Sakesh Kumar Agarwal
Consultant Pathologist
MBBS. DCP

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Test Description	Value(s)	Unit(s)	Reference Range
Blood Sugar Fasting			
Glucose Fasting *Hexokinase*	**146.4 H***	mg/dL	70 - 100

Interpretation:

Status	Fasting plasma glucose in mg/dL
Normal	70 - 100
Impaired fasting glucose	101 - 125
Diabetes	≥126

Reference : American Diabetes Association

Comment :
Blood glucose determinations in commonly used as an aid in the diagnosis and treatment of diabetes. Elevated glucose levels (hyperglycemia) may also occur with pancreatic neoplasm, hyperthyroidism, and adrenal cortical hyper function as well as other disorders. Decreased glucose levels (hypoglycemia) may result from excessive insulin therapy insulinoma, or various liver diseases.

Note
1.The diagnosis of Diabetes requires a fasting plasma glucose of > or = 126 mg/dL or a random / 2 hour plasma glucose value of > or = 200 mg/dL with symptoms of diabetes mellitus.
2.Very high glucose levels (>450 mg/dL in adults) may result in Diabetic Ketoacidosis.

Note :- (H* - High , L* - Low ,CL* - Critical Low,CH* - Critical High)

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DMC - 97314

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Test Description	Value(s)	Unit(s)	Reference Range
Insulin Fasting			
Insulin (Fasting) *CMIA*	11.7	µU/mL	<25.0

Interpretation:

Note

1. A single random blood sample for insulin may provide insufficient information due to wide variation in the time responses of insulin levels and blood glucose.
2. Stimulation of insulin secretion may be caused by many factors like hyperglycemia, glucagon, amino acids, growth hormone and catecholamines.
3. Interference in insulin assay is seen due to insulin antibodies which develop in patients treated with bovine or porcine insulin.

Clinical Utility

· Evaluation of fasting hypoglycemia
· Evaluation of Polycystic Ovary syndrome
· Classification of Diabetes mellitus
· Predict Diabetes mellitus
· Assessment of Beta cell activity
· Select optimal therapy for Diabetes
· Investigation of insulin resistance
· Predict the development of Coronary Artery Disease

Increased levels -

Insulinoma, Some Type II diabetic patients, Infantile hypoglycemia, Hyperinsulinism, Obesity, Cushing's syndrome, Oral contraceptives, Acromegaly, Hyperthyroidism

Decreased levels -

Untreated Type I Diabetes mellitus

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Test Description	Value(s)	Unit(s)	Reference Range
C Peptide Fasting			
C - PEPTIDE (Fasting) *ECLIA*	**<0.0200 L***	ng/mL	1.1 - 4.4

Result rechecked. Please correlate clinically.

Interpretation:
Clinical Use
1. Assess pancreatic islet cell function
2. Distinguish insulin secreting tumors (Insulinoma) from exogenous insulin administration as a cause of hypoglycemia (commercial insulin does not contain C-peptide). Sera from Insulinoma patients have high insulin and high C-peptide levels whereas hypoglycemia from injected or exogenous insulin shows high insulin and low C-peptide levels.
3. Distinguish Type I and Type II Diabetes mellitus

Increased Levels –
Insulinoma & Type II Diabetes

Decreased Levels-
Type I Diabetes & Exogenous insulin administration

Note :- (H* - High , L* - Low ,CL* - Critical Low,CH* - Critical High)

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Glutamate Decarboxylase 65 (GAD 65) Antibody Type 1 Diabetes

Test Description	Value(s)	Unit(s)	Reference Range
GAD-65 (GLUTAMIC ACID DECARBOXYLASE- 65) ,SERUM *(Serum,CLIA)*	5.58	IU/mL	<17

Interpretation:
Comments
Glutamic Acid Decarboxylase (GAD) autoantibodies are detected in most newly diagnosed Type1 A Diabetes patients and in about 80% of prediabetic first degree relatives of patients. Anti GAD are directed primarily at the GAD 65 isoform which is found mainly in pancreatic islet cells and in the central nervous system. Presence of GAD autoantibodies is also associated with Stiff man syndrome.

Uses
· To diagnose Insulin Dependent Diabetes mellitus (IDDM) and differentiate from Type 2 Diabetes (NIDDM)
· To assess risk and predict onset of development of IDDM specially in first degree relatives
· To assess risk of development of related endocrine disorders

HOMA IR Index

HOMA IR Index	1.68		

*** End Of Report ***

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LABORATORY REPORT

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Bio-Rad CDM System

PATIENT REPORT

Patient Data

Sample ID:
Patient ID:
Name:
Physician:
Sex:
DOB:

Comments:

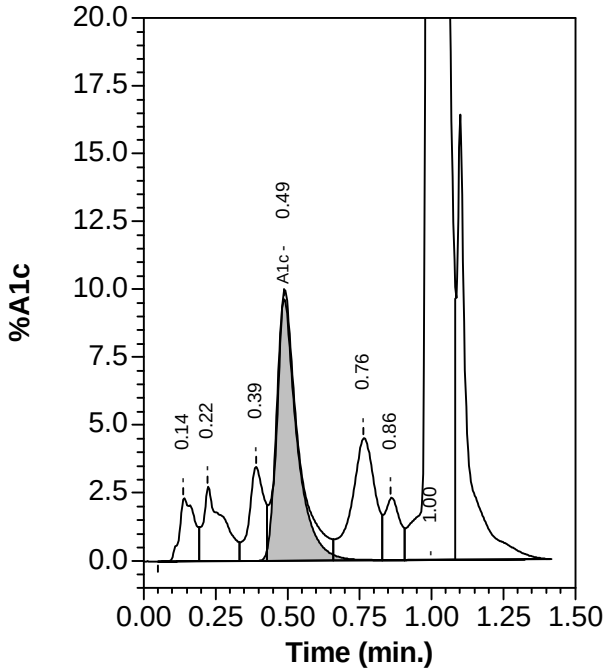
Analysis Data

Analysis Performed:
Injection Number:
Run Number:
Rack ID:
Tube Number:
Report Generated:
Operator ID:

Peak Name	NGSP %	Area %	Retention Time (min)	Peak Area
A1a	---	1.4	0.136	33340
A1b	---	2.2	0.220	50738
LA1c	---	2.1	0.390	48632
A1c	9.6	---	0.487	190210
P3	---	4.2	0.763	98543
P4	---	1.4	0.858	32952
Ao	---	80.5	0.998	1879704

Total Area: 2,334,119

HbA1c (NGSP) = 9.6 %



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2. It is to be presumed that the tests performed pertain to the specimen/sample attributed to the Customer's name or identification. It is presumed that the verification particulars have been cleared out by the customer or his/her representation at the point of generation of said specimen / sample. It is hereby clarified that the reports furnished are restricted solely to the given specimen only.

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