

NAME : MRS VEENU BHUTANI

Ref. By : . SELF

Address :

46 Years / Female Reg No. : 20033 Reg. Date : 13/08/2022 08:31AM

Collected At : MedZone Center

INVESTIGATION REPORT

CLINICAL BIOCHEMISTRY

TEST	<u>RESULT</u>	<u>UNIT</u>	BIOLOGICAL REF RANGE	TEST METHOD
GGT (Gamma Glutamyl Transfe	<u>rase)</u>			
Sample Type	: SERUM			
GGT (Gamma Glutamyl Transferase)	: 41	U/I	Up to 38	Spectrophotometr
Glycosylated Hemoglobin (GHb	/HBA1c)			
Sample Type	: WB - EDTA	A		
Glycosylated Hemoglobin (GHb/HBA1c)	: 7.2	%	4.8 - 6.0 : Non Diabetic	Biorad D10 HPLC
			6.0 - 7.0 : Good Control	
			7.0 - 8.0 : Weak Control	
			More than 8 : Poor Control	

Glycosylated hemoglobin (*hemoglobin A1c, HbA1c, A1C, or Hb1c*; sometimes also *HbA1c*) is a form of hemoglobin used primarily to identify the average plasma glucose concentration over prolonged periods of time. It is formed in a non-enzymatic pathway by hemoglobin's normal exposure to high plasma levels of glucose. Glycation of hemoglobin has been associated with cardiovascular disease, nephropathy and retinopathy in diabetes mellitus. Monitoring the HbA1c in type-1 diabetic patients may improve treatment. HbA1c is a weighted average of blood glucose levels during the preceding 120 days, which is the average life span of red blood cells. A large change in mean blood glucose can increase HbA1c levels within 1-2 weeks. Sudden changes in HbA1c may occur because recent changes in blood glucose levels contribute relatively more to the final HbA1c levels than earlier events. For instance, mean blood glucose levels in the 30 days immediately preceding blood sampling contribute 50% to the HbA1c level, whereas glucose levels in the preceding 90-120 day period contribute only 10%. Thus, it does not take 120 days to detect a clinically meaningful change in HbA1c following a significant change in mean plasma glucose level.

METHOD: Ion Exchange Chromatography High performance liquid chromatography(HPLC)

INSTRUMENT: D -10 Bio-Rad Laboratories;FRANCE



PH-09228333 MOBILE-9300888178

NAME : MRS VEENU BHUTANI

Ref. By : . SELF

Address :

46 Years / Female Reg No. : 20033 Reg. Date : 13/08/2022 08:31AM

Collected At : MedZone Center

INVESTIGATION REPORT

CLINICAL BIOCHEMISTRY

TEST	<u>RESULT</u>	<u>UNIT</u>	BIOLOGICAL REF RANGE	TEST METHOD
LFT (Liver Function Test)				
Sample Type	: SERUM			
Bilirubin Total	: 0.81	mg/dl	Adults : 0.1 - 1.2 New born : 0.1 - 12.6	Diazoted Sulfanilic
Bilirubin Direct	: 0.35	mg/dl	Upto 0.4	Diazoted Sulfanilic
Bilirubin Indirect	: 0.46	mg/dl	0.3 - 1.0	
Aspartate Amino Transferase (SGOT)	: 53.28	U/L	Upto 41	IFCC without pyridoxal phosphate
Alanine Amino Transferase (SGPT)	: 63.27	U/L	Upto 40	IFCC without pyridoxal phosphate
Alkaline Phosphatase	: 123.0	U/L	1 month to 9 yrs : 82 - 383 10 yrs to 15 yrs : 42 - 390 16 yrs to 18 yrs : 52 - 171 Adults : 53 - 141	Diethanolamine buffer
Serum Protein	: 7.9	gm/dl	6.0 - 8.3	Biuret
Serum Albumin	: 4.73	gm/dl	3.5 - 5.2	Bromocresol green
Serum Globulin	: 3.17	gm/dl	2.5 - 3.5	
Alb/Glo Ratio	: 1.49		1-2	

LFT: Liver Function tests are a measurement of blood components that provide a lead to the existence, the extent and the type of liver damage.

BILIRUBIN: Bilirubin levels may rise due to hemolysis, failure of conjugating mechanism in the liver, obstruction in the biliary system.

ALKALINE PHOSPHATASE: *Increase in ALP activity is an index of cholestasis, a blockage of bile flow. *Increase may also occur in infiltrative diseases of the liver and cirrhosis

TRANSAMINASES (AST & ALT): *The serum transaminases activities are a measure of the integrity of liver cells. *They are elevated in acute damage to hepatocytes irrespective

of etiology. *The causes include – hepatitis, toxic injury, drug overdose, shock, severe hypoxia.

SERUM TOTAL PROTEINS: A decrease in serum total proteins indicates a decrease in the liver's synthetic capacity and thus indicates the severity of the liver disease.

METHOD: Spectrophotometry

INSTRUMENT: BS-400 Fully Automated Chemistry Analyser



NAME : MRS VEENU BHUTANI

Ref. By : . SELF

46 Years / Female Reg No. : 20033 Reg. Date : 13/08/2022 08:31AM Collected At : MedZone Center

INVESTIGATION REPORT

CLINICAL BIOCHEMISTRY

TEST	<u>RESULT</u>	<u>UNIT</u>	BIOLOGICAL REF RANGE	TEST METHOD
Lipid Profile				
Sample Type	: SERUM			
Cholesterol Total	: 284.5	mg/dl	Desirable : < 200 Moderate Risk : 200 - 239 High Risk :> 240	CHOD-PAP
Cholesterol HDL	: 44.02	mg/dl	Desirable : > 37 Moderate Risk : 25 - 37 High Risk : < 12 - 18	Direct Clearance
Cholesterol LDL	: 204.68	mg/dl	Desirable : < 130 Moderate Risk : 130 - 159 High Risk :> 160	Direct Clearance
Cholesterol VLDL	: 35.8	mg/dl	6 - 40	
Triglycerides	: 179.00	mg/dl	< 160 : Normal 160 - 400 : Slightly Elevated 400 - 600 : Elevated > 600 : Highly Elevated	GPO
T.Chol / HDL Chol Ratio	: 6.46		2.9 - 5.1	
LDL / HDL Ratio	: 4.65		1.7 - 3.5	

NOTE : Lipid Profile RANGES AS PER NCEP-ATP III are:

Serum cholesterol (Total) : Desirable : < 200 mg/dl, Borderline : 200 - 239 mg/dl, Elevated : >/= 240 mg/dl Serum high density lipoprotein cholesterol(HDL) : Desirable : > 60 mg/dl, Borderline : 40- 60 mg/dll, Elevated : 40 mg/dl Total cholesterol : HDL cholesterol ratio : Low risk : 3.3-4.4, Average risk : 4.4-7.1, Moderate risk : 7.1-11.0, High risk : >11.0 Serum low density lipoprotein (LDL) cholesterol : Desirable : 100 mg/dl, Borderline : 100- 159 mg/dll, Elevated : >/= 160 mg/dl Triglycerides : Desirable : 150 mg/dl, Borderline : 150- 199 mg/dll, High : 200 - 499 mg/dl, Very High : >/= 500 mg/dl HDL measurement done by Direct HDL clearance method (CDC approved). As per the Friedwald Equation, VLDL & LDL values are not applicable for triglyceride values above 400 mg/dl.



NAME : MRS VEENU BHUTANI

Ref. By : . SELF

Address •

Years / Female Reg No. : 20033 46 : 13/08/2022 08:31AM Req. Date Collected At : MedZone Center

INVESTIGATION REPORT

CLINICAL BIOCHEMISTRY

TEST	<u>RESULT</u>	<u>UNIT</u>	BIOLOGICAL REF RANGE	TEST METHOD
THYROID PROFILE II				
Sample Type	: SERUM			
Free T3 (Trilodothyronine-Free)	: 2.96	pg/mL	1.4 - 5.5 : 1-30 days 2.0 - 6.9 : 1-12 month 2.4 - 6.2 : 1-15 years 2.1 - 3.8 : Adults	E CLIA
Free T4 (Thyroxine - Free)	: 1.24	ng/dl	0.48 - 2.32 : 1-30 days 0.76 - 2.00 : 1-12 month 0.90 - 1.59 : 1-15 years 0.82 - 1.83 : Adults	
TSH (Thyroid Stimulating Hormone)	: 3.47	μlU/mL	0.37 - 4.8 : Adults 0.46 - 8.1 : 1mon–5 Yrs 0.52 -16.0 : 1 – 30 Days	

Triiodothyronine is one of the thyroid hormones present in serum which regulate metabolism. Determination of this hormone concentration is important for the diagnostic differentiation of euthyroid, hyperthyroid and hypothyroid states. The major fraction of total triiodothyronine is bound to the transport proteins (TBG, prealbumin, albumin). Free triiodo-thyronine (fT3) is the physiologically active form of the thyroid hormone triiodothyronine (T3). The determination of free T3 has the advantage of being independent of

changes in the concentrations and binding properties of the binding proteins; additional determination of a binding parameter (T-uptake, TBG) is therefore unnecessary. The sequential testing procedure and the use of a labeled antibody reduces the possibility of interference due to altered binding properties of the serum, as can occur with assays employing labeled antigen (analog method). A variety of methods are available for estimating the free thyroid hormone levels. The direct measurement of fT4 and fT3 via equilibrium dialysis or ultrafiltration is mainly used as a reference method for standardizing the immunological procedures generally used for routine diagnostic purposes. In the Roche Cobas FT3 test the determination of free triiodothyronine is made with the aid of a specific anti-T3 antibody labeled with a ruthenium complex **.

The thyroid hormone thyroxine (T4) is physiologically part of the regulating system of the thyroid gland and has an effect on general meta-bolism. The major fraction of the total thyroxine is bound to transport proteins (TBG, prealbumin and albumin). The free thyroxine (fT4) is the physiologically active thyroxine component. The determination of free thyroxine is an important element in clinical routine diagnostics. Free T4 is measured together with TSH when thyroid function disorders are suspected. The determination of fT4 is also suitable for monitoring thyrosuppressive therapy. The determination of free T4 has the advantage of being independent of changes in the concentrations and binding properties of the binding proteins; additional determination of a binding parameter (T-uptake, TBG) is therefore unnecessary. A variety of methods are available for estimating the free thyroid hormone levels. The direct measurement of fT4 and fT3 via equilibrium dialysis or ultrafiltration is mainly used as a reference method for standardizing the indirect procedures generally used for routine diagnostic purposes. In the Elecsys FT4 test the determination of free thyroxine is made with the aid of a specific anti-T4 antibody labelec with a ruthenium complex**. The quantity of antibody used is so small (equivalent to approx. 1–2% of the total T4 content of a normal serum sample) that the equilibrium between bound and unbound T4 remains virtually unaffected.

METHOD: One-step sandwich and competitive FEIA

INSTRUMENT: TOSHO AIA-360 JAPAN

: 13/08/2022 08:31AM Sample Registered On Sample Received On **Report Released On** Sample Barcode :

: 13/08/2022 08:35AM : 13/08/2022 04:15PM

--- End Of Report ---

Checked By:duwash

Dr. VANDANA CHANDANI



KORBA- 495677 PH-09228333 MOBILE-9300888178

NAME : MRS VEENU BHUTANI

Ref. By : . SELF

Address :

46 Years / Female Reg No. : 20033 Reg. Date : 13/08/2022 08:31AM

Collected At : MedZone Center

INVESTIGATION REPORT

HAEMATOLOGY

TEST	<u>RESULT</u>	<u>UNIT</u>	BIOLOGICAL REF RANGE	TEST METHOD
CBP (Complete Blood Picture)				
Sample Type	: WB - EDTA			
Haemoglobin	: 13.6	gm%	11.5 - 16.0	
Total Erythrocyte Count	: 5.16	M/cmm	4.0 - 6.2	Cell Counter
Hemotocrit (PCV)	: 43.1	Vol %	35.0 - 50.0	
Mean Corpuscular Volume	: 83.5	fL	80 - 100	
Mean Corpuscular Hemoglobin	: 26.4	PG	26 - 34	
МСНС	: 31.6	g/L	31 - 35	
RDW	: 14.1	%	11.5 - 14.5	
Total Leucocyte Count.	: 7680	/cumm	4000 - 11000	
DIFFERENTIAL COUNT :				
Neutrophils	: 64	%	40 - 75	
Lymphocytes.	: 26	%	20 - 40	Cell Counter
Monocytes.	: 05	%	2 - 10	Cell Counter
Eosinophils	: 05	%	1 - 6	Cell Counter
Basophils	: 0	%	0 - 1	Cell Counter
Platelet Count	: 266000	/cmm	150000 - 450000	

ESR (Erythrocyte Sedimentation Rate)

Sample Type	: PLASMA -Na Citrate			
ESR (Erythrocyte Sedimentation Rate)	: 10	mm/hr	0 - 20 :1st Hour	Sedimentation me

		End Of Report	
Sample Registered On	: 13/08/2022 08:31AM		1
Sample Received On	: 13/08/2022 08:35AM		an.
Report Released On	: 13/08/2022 04:15PM		
Sample Barcode :		Checked By:duwash	