ADVANCE DIAGNOSTICS CENTRE
C1-C2/17A, NEAR NIHARIKA TALKIES
KORBA- 495677
PH-09228333 MOBILE-9300888178

NAME	: MR ASHISH KUMAR	32	Years / Male	Reg No.	: 25444
Ref. By	: DR. SAHU K.N.(MD MED.)			Reg. Date	: 10/10/2022 12:58PM
Address	:			Collected At	: MedZone Center

INVESTIGATION REPORT

CARDIAC ENZYMES

TEST	RESULT	UNIT	BIOLOGICAL REF RANGE	TEST METHOD
CK-MB (Creatine Phospho Kinase-MB)				
Sample Type	: SERUM			
CK-MB (Creatine Phospho Kinase-MB)	: 4.32	NG/ML	0.1-4.94	Fully Automated Roche E311
D-Dimer				
Sample Type	: PLASMA -Na Citrate			
D-Dimer	: 0.15	mg/L	Up to 0.50	
Glucose - Fasting				
Sample Type	: PLASMA - NaF			
Blood Glucose-Fasting (Methodology : GOD/POD)	: **247**	mg/dl	70 - 110	

ADVANCE DIAGNOSTICS CENTRE
C1-C2/17A, NEAR NIHARIKA TALKIES
KORBA- 495677
PH-09228333 MOBILE-9300888178

NAME	: MR ASHISH KUMAR	32	Years / Male	Reg No.	: 25444
Ref. By	: DR. SAHU K.N.(MD MED.)			Reg. Date	: 10/10/2022 12:58PM
Address	:			Collected At	: MedZone Center

INVESTIGATION REPORT

CLINICAL BIOCHEMISTRY

TEST	RESULT	UNIT	BIOLOGICAL REF RANGE	TEST METHOD
Glycosylated Hemoglobin (GHb/HBA1c)				
Sample Type	: WB - EDTA			
Glycosylated Hemoglobin (GHb/HBA1c)	: 9.6	%	4.8 - 6.0 : Non Diabetic 6.0 - 7.0 : Good Control 7.0 - 8.0 : Weak Control More than 8 : Poor Control	Biorad D10 HPLC

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 HbA 1c 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 HbA 1c 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

ADVANCE DIAGNOSTICS CENTRE
C1-C2/17A, NEAR NIHARIKA TALKIES
KORBA- 495677
PH-09228333 MOBILE-9300888178

NAME	: MR ASHISH KUMAR	32 Years / Male	Reg No.	:	25444
Ref. By	: DR. SAHU K.N.(MD MED.)		Reg. Date	:	10/10/2022 12:58PM
Address	:		Collected At	:	MedZone Center

INVESTIGATION REPORT

CARDIAC ENZYMES

TEST	RESULT	UNIT	BIOLOGICAL REF RANGE	TEST METHOD
Myoglobulin-Serum				
Sample Type	: SERUM			
Myoglobulin-Serum	: **17.81**	ng/mL	28 - 107	E CLIA

Myoglobin is a cytoplasmic protein in striated cardiac and skeletal musculature. It is involved in the transport of oxygen within the myocytes and also serves as an oxygen reservoir. Myoglobin has a molecular weight of 17.8 kD and is hence small enough to pass rapidly into the circulation following damage to the myocytes. The determination of myoglobin in serum is an important factor in the diagnosis of acute myocardial infarction (AMI), early reinfarction and successful reperfusion following lysis therapy. The myoglobin concentration rises after approx. just 2 hours following the occurrence of symptoms, and is therefore regarded as a very early marker of myocardial infarction. Depending on the therapeutic reperfusion measures taken, myoglobin reaches its maximum concentration in the circulation 4 -12 hours after the commencement of infarction and falls back to normal levels after about 24 hours. Elevated myoglobin values can also occur after skeletal muscle damage and in cases of greatly restricted renal function. The Roche Cobas Myoglobin assay is based on the sandwich principle using two different monoclonal antibodies directed against human myoglobin.

METHOD: ELECTRO CHEMILUMINESCENCE ASSAY

INSTRUMENT: ROCHE COBAS e411

ADVANCE DIAGNOSTICS CENTRE
C1-C2/17A, NEAR NIHARIKA TALKIES
KORBA- 495677
PH-09228333 MOBILE-9300888178

NAME	: MR ASHISH KUMAR	32	Years / Male	Reg No.	: 25444
Ref. By	: DR. SAHU K.N.(MD MED.)			Reg. Date	: 10/10/2022 12:58PM
Address	:			Collected At	: MedZone Center

INVESTIGATION REPORT

CLINICAL BIOCHEMISTRY

TEST	RESULT	UNIT	BIOLOGICAL REF RANGE	TEST METHOD
Free T4 (Thyroxine - Free)				
Sample Type	: SERUM			
Free T4 (Thyroxine - Free)	: 2.21	ng/dL	0.48 - 2.32 : 1-30 days 0.76 - 2.00 : 1-12 mon 0.90 - 1.59 : 1-15 yr 0.82 - 1.83 : Adults	E CLIA

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 labeled 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

ADVANCE DIAGNOSTICS CENTRE
C1-C2/17A, NEAR NIHARIKA TALKIES
KORBA- 495677
PH-09228333 MOBILE-9300888178

NAME	: MR ASHISH KUMAR	32 Years / Male		Reg No.	: 25444
Ref. By	: DR. SAHU K.N.(MD MED.)			Reg. Date	: 10/10/2022 12:58PM
Address	:			Collected At	: MedZone Center

INVESTIGATION REPORT

CLINICAL BIOCHEMISTRY

TEST	RESULT	UNIT	BIOLOGICAL REF RANGE		TEST METHOD
Free T3 (Trilodothyronine-Free)					
Sample Type	: SERUM				
Free T3 (Trilodothyronine-Free)	: 5.08	pg/mL	1.4 - 5.5	: 1-30 Days	E CLIA
			2.0 - 6.9	: 1-12 Mon	
			2.4 - 6.2	: 1-15 Yr	
			2.1 - 3.8	: Adults	

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**.

METHOD: One-step sandwich and competitive FEIA

INSTRUMENT: TOSHO AIA-360 JAPAN

Troponin - I				
Sample Type	: SERUM			
Troponin - I	: <0.010	ng/ml	<0.10	Chemiluminescenc

ADVANCE DIAGNOSTICS CENTRE
C1-C2/17A, NEAR NIHARIKA TALKIES
KORBA- 495677
PH-09228333 MOBILE-9300888178

NAME	: MR ASHISH KUMAR	32	Years / Male	Reg No.	: 25444
Ref. By	: DR. SAHU K.N.(MD MED.)			Reg. Date	: 10/10/2022 12:58PM
Address	:			Collected At	: MedZone Center

INVESTIGATION REPORT

CLINICAL BIOCHEMISTRY

TEST	RESULT	UNIT	BIOLOGICAL REF RANGE	TEST METHOD
Uric Acid				
Sample Type	: SERUM			
Uric Acid	: 3.8	mg/dl	3.5 - 7.2	Fully Automated Roche E311
LFT (Liver Function Test)				
Sample Type	: SERUM			
Bilirubin Total	: 0.68	mg/dl	Adults : 0.1 - 1.2 New born : 0.1 - 12.6	Diazoted Sulfanilic
Bilirubin Direct	: 0.32	mg/dl	Upto 0.4	Diazoted Sulfanilic
Bilirubin Indirect	: 0.36	mg/dl	0.3 - 1.0	
Aspartate Amino Transferase (SGOT)	: 13.8	U/L	Upto 41	IFCC without pyridoxal phosphate
Alanine Amino Transferase (SGPT)	: 37.0	U/L	Upto 40	IFCC without pyridoxal phosphate
Alkaline Phosphatase	: 98.8	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	: 7.8	gm/dl	6.0 - 8.3	Biuret
Serum Albumin	: 4.8	gm/dl	3.5 - 5.2	Bromocresol green
Serum Globulin	: 3	gm/dl	2.5 - 3.5	
Alb/Glo Ratio	: 1.6		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

ADVANCE DIAGNOSTICS CENTRE
C1-C2/17A, NEAR NIHARIKA TALKIES
KORBA- 495677
PH-09228333 MOBILE-9300888178

NAME	: MR ASHISH KUMAR	32	Years / Male	Reg No.	: 25444
Ref. By	: DR. SAHU K.N.(MD MED.)			Reg. Date	: 10/10/2022 12:58PM
Address	:			Collected At	: MedZone Center

INVESTIGATION REPORT

CLINICAL BIOCHEMISTRY

TEST	RESULT	UNIT	BIOLOGICAL REF RANGE	TEST METHOD
Lipid Profile				
Sample Type	: SERUM			
Cholesterol Total	: 184.9	mg/dl	Desirable : < 200 Moderate Risk : 200 - 239 High Risk : > 240	CHOD-PAP
Cholesterol HDL	: **41.6**	mg/dl	Desirable : > 37 Moderate Risk : 25 - 37 High Risk : < 12 - 18	Direct Clearance
Cholesterol LDL	: 123.78	mg/dl	Desirable : < 130 Moderate Risk : 130 - 159 High Risk : > 160	Direct Clearance
Cholesterol VLDL	: 19.52	mg/dl	6 - 40	
Triglycerides	: 97.6	mg/dl	< 160 : Normal 160 – 400 : Slightly Elevated 400 – 600 : Elevated > 600 : Highly Elevated	GPO
T.Chol / HDL Chol Ratio	: 4.44		2.9 - 5.1	
LDL / HDL Ratio	: 2.98		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.

Troponin - T				
Sample Type	: SERUM			
Troponin - T	: NEGATIVE	pg/ml	0-14	ELECTROCHEMILUMINESCENCE(ECL)

ADVANCE DIAGNOSTICS CENTRE
C1-C2/17A, NEAR NIHARIKA TALKIES
KORBA- 495677
PH-09228333 MOBILE-9300888178

NAME	: MR ASHISH KUMAR	32	Years / Male	Reg No.	: 25444
Ref. By	: DR. SAHU K.N.(MD MED.)			Reg. Date	: 10/10/2022 12:58PM
Address	:			Collected At	: MedZone Center

INVESTIGATION REPORT

CLINICAL BIOCHEMISTRY

TEST	RESULT	UNIT	BIOLOGICAL REF RANGE	TEST METHOD
Thyroid Profile				
Sample Type	: SERUM			
Tri Iodothyronine (T3)	: 1.92	ng/mL	0.6-2.7 : 1 - 10 Years 0.6-1.81 : Adults Pregnancy 0.9 - 3.0 : Ist Trimester 0.9 - 3.6 : 2nd & 3rdTr	ECL
Total Thyoxine (T4)	: 13.71	µg/dL	7.8 - 16.5 : 1 - 12 Months 4.6 - 11.6 : Adults 9.1 - 14.0 : Pregnancy (15 - 40 Weeks)	ECL
Thyroid Stimulating Hormone (TSH)	: **0.008**	µIU/mL	0.52 - 16.0 : 1 - 30 Days 0.46 - 8.10 : 1 Mn - 5 Yrs 0.37 - 4.8 : Adults Cord blood : 2.3 - 13.2	ECL

Three common ways in which there may be inadequate amounts of the thyroid hormone for normal metabolism. **1.** Primary hypothyroidism, in which there is a raised TSH and a low T4 and low T3. This is due to failure of the thyroid gland, possibly due to autoantibody disease, possibly due to toxic stress or possibly due to iodine deficiency. **2.** The second, the most common cause of thyroid failure, occurs at the pituitary level. In this condition there is inadequate thyroid stimulating hormone (TSH) produced from the pituitary and so one tends to see low or normal TSH, low T4s and variable T3s. This condition is most common in many patients with chronic fatigue syndrome, where there is a general suppression of the hypothalamic-pituitary-adrenal axis. **3.** The third type of under-functioning is due to poor conversion of T4 to T3. This requires enzymes and co-factors, in particular selenium, zinc and iron. In this condition there are normal or possibly slightly raised levels of TSH, normal levels of T4 but low levels of T3. This requires micronutrients and also T3 to correct.

Therefore, in any patient suspecting of thyroid problem routinely TSH, a Free T4 and a Free T3 are also advisable. Any patients who are taking T3 as part of their thyroid supplement need to have their T3 levels monitored as well as T4. T3 is much more quickly metabolized than T4 and blood tests should be done between 4-6 hours after their morning dose.

METHOD: One-step sandwich and competitive FEIA
INSTRUMENT: TOSHO AIA-360 JAPAN

ADVANCE DIAGNOSTICS CENTRE
C1-C2/17A, NEAR NIHARIKA TALKIES
KORBA- 495677
PH-09228333 MOBILE-9300888178

NAME	: MR ASHISH KUMAR	32	Years / Male	Reg No.	: 25444
Ref. By	: DR. SAHU K.N.(MD MED.)			Reg. Date	: 10/10/2022 12:58PM
Address	:			Collected At	: MedZone Center

INVESTIGATION REPORT

CLINICAL BIOCHEMISTRY

TEST	RESULT	UNIT	BIOLOGICAL REF RANGE	TEST METHOD
RENAL FUNCTION TEST				
Sample Type	: SERUM			
Blood urea	: 18.0	mg/dl	10-40	Urease UV
Serum Creatinine	: 0.70	mg/dl	0.6-1.4	Alkaline Picrate
Blood Urea Nitrogen	: 8.41	mg/dl	7-21	
Serum Sodium	: **131**	mmol/L	136-145	ISE
Serum Potassium	: 4.76	mmol/L	3.5-5.1	ISE
chloride	: **93.4**	Meq/L	96-106	
NT-PRO BNP				
Sample Type	: Select Sample Type			
NT-PRO BNP	: 13.93	pg/ml	0-300	

--- End Of Report ---

Sample Registered On : 10/10/2022 12:58PM
Sample Received On : 10/10/2022 01:05PM
Report Released On : 10/10/2022 07:45PM
Sample Barcode :

Checked By:NAREN

Dr. VANDANA CHANDANI

ADVANCE DIAGNOSTICS CENTRE
C1-C2/17A, NEAR NIHARIKA TALKIES
KORBA- 495677
PH-09228333 MOBILE-9300888178

NAME	: MR ASHISH KUMAR	32	Years / Male	Reg No.	: 25444
Ref. By	: DR. SAHU K.N.(MD MED.)			Reg. Date	: 10/10/2022 12:58PM
Address	:			Collected At	: MedZone Center

INVESTIGATION REPORT

CLINICAL PATHOLOGY

TEST	RESULT	UNIT	TEST METHOD
CUE (Complete Urine Examination)			
Sample Type	: URINE		
PHYSICAL EXAMINATION :			
Color	: Pale Yellow		
Appearence	: CLEAR		
Reaction (pH)	: 5.6	4.8-7.6	
Specific Gravity	: 1.021	1.002-1.030	
CHEMICAL EXAMINATION :			
Proteins	: Trace		
Sugar	: PRESENT+		
MICROSCOPIC EXAMINATION :			
Pus (WBC) Cells	: 2-3/HPF		
Epithelial Cells.	: 1-3/HPF		
R.B.C	: Absent		
Casts	: Absent		
Crystals	: Absent		

--- End Of Report ---

Sample Registered On : 10/10/2022 12:58PM
Sample Received On : 10/10/2022 01:05PM
Report Released On : 10/10/2022 04:45PM
Sample Barcode :

Checked By:NAREN

Dr. VANDANA CHANDANI

ADVANCE DIAGNOSTICS CENTRE
C1-C2/17A, NEAR NIHARIKA TALKIES
KORBA- 495677
PH-09228333 MOBILE-9300888178

NAME	: MR ASHISH KUMAR	32	Years / Male	Reg No.	: 25444
Ref. By	: DR. SAHU K.N.(MD MED.)			Reg. Date	: 10/10/2022 12:58PM
Address	:			Collected At	: MedZone Center

INVESTIGATION REPORT

HAEMATOLOGY

TEST	RESULT	UNIT	BIOLOGICAL REF RANGE	TEST METHOD
CBP (Complete Blood Picture)				
Sample Type	: WB - EDTA			
Haemoglobin	: 14.5	gm%	12.0 - 18.0	
Total Erythrocyte Count	: 5.43	M/cmm	4.0 - 6.2	Cell Counter
Hemotocrit (PCV)	: 43.1	Vol %	35.0 - 50.0	
Mean Corpuscular Volume	: **79.4**	fL	80 - 100	
Mean Corpuscular Hemoglobin	: 26.7	PG	26 - 34	
MCHC	: 33.6	g/L	31 - 35	
RDW	: 12.6	%	11.5 - 14.5	
Total Leucocyte Count.	: **22060**	/cumm	4000 - 11000	
DIFFERENTIAL COUNT :				
Neutrophils	: **88**	%	40 - 75	
Lymphocytes.	: **08**	%	20 - 40	Cell Counter
Monocytes.	: 03	%	2 - 10	Cell Counter
Eosinophils	: 01	%	1 - 6	Cell Counter
Basophils	: 0	%	0 - 1	Cell Counter
Platelet Count	: 408000	/cmm	150000 - 450000	
ESR (Erythrocyte Sedimentation Rate)				
Sample Type	: PLASMA -Na Citrate			
ESR (Erythrocyte Sedimentation Rate)	: 15	mm/hr	0 - 15 :1st Hour	Sedimentation me

--- End Of Report ---

Sample Registered On : 10/10/2022 12:58PM
Sample Received On : 10/10/2022 01:05PM
Report Released On : 10/10/2022 03:26PM
Sample Barcode :

Checked By:NAREN

Dr. VANDANA CHANDANI