Patient Name	**: Mrs. ANJUM AZAM**	Specimen Drawn ON	: 16/Jul/2024 10:29AM
Age/Gender	: 54 YRS /F	Specimen Received ON	: 16/Jul/2024 12:13PM
UHID/MR No	: APRJ.0000047935	Report Date	: 16/Jul/2024 12:43PM
Visit ID	**: MPRJ48282**	Client Code	: UP396MH
Ref Doctor	: Dr.SELF	Barcode No	: B7223600
Client Name	: ROZY PATHOLOGY	Ref Customer	: SELF

DEPARTMENT OF HAEMATOLOGY

SWASTHYA CARE IV

Test Name	Result	Unit	Bio. Ref. Range	Method
COMPLETE BLOOD COUNT(CBC)23				
R.B.C	**2.64**	Millions/cumm	4.5-5.5	Impedance variation
Haemoglobin	**8.2**	g/dl	12.0-15.0	Spectrophotometry
Packed Cell Volume	**24.30**	%	40.0-50.0	Analogical Integration
MCV	92.05	fL	80-100	
MCH	31.06	pg	27.0-32.0	Calculated
MCHC	33.74	g/dL	27.0-48.0	Calculated
RDW-CV	12.3	%	11.5-14.0	Calculated
Platelet Count	266	x1000/uL	150-450	Impedance Variation
Total WBC Count	**11200**	/cumm	4000-10000	Impedance Variation
MPV	9.70	%	9.1-11.9	Calculated
PCT	0.26	%	0.18-0.39	Calculated
PDW	14.90	%	9.0-15.0	Calculated
Differential Leucocyte Count				
Neutrophil	70	%	40.0-80.0	flow cytometry/manual
Lymphocyte	20	%	20.0-40.0	flow cytometry/manual
Monocytes	04	%	2-10	flow cytometry/manual
Eosinophils	06	%	01-06	Flow cytometry/manual
Basophils	00	%	0-1	Flow cytometry/manual
Absolute Neutrophils	7.84	1000/µL	2.00-7.00	
Absolute Lymphocytes	2.24	1000/µL	1.00-3.00	
Absolute Monocytes	0.45	1000/µL	0.20-1.00	
Absolute Eosinophils	**0.67**	1000/µL	0.02-0.50	
Neutrophil-Lymphocyte Ratio	3.50			Calculated
Lymphocyte-Monocyte Ratio	5			Calculated
Platelet-Lymphocyte Ratio	13			Calculated

This report has been validated by:

DR. AKANSHA SINGH
M.B.B.S., M.D. (PATH)

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M.B.B.S., M.D. (PATH)

DR. PAWAN KUMAR
Phd. BIOCHEMISTRY

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UHID/MR No	: APRJ.0000047935	Report Date	: 16/Jul/2024 01:05PM
Visit ID	**: MPRJ48282**	Client Code	: UP396MH
Ref Doctor	: Dr.SELF	Barcode No	: B7223598
Client Name	: ROZY PATHOLOGY	Ref Customer	: SELF

DEPARTMENT OF BIOCHEMISTRY

SWASTHYA CARE IV

Test Name	Result	Unit	Bio. Ref. Range	Method
GLUCOSE FASTING				
Sample Type : Sod.Fluoride - F				
Glucose Fasting	92	mg/dl	70.0 - 110.0	GOD-POD

Interpretation (In accordance with the American diabetes association guidelines):

- A fasting plasma glucose level below 110 mg/dL is considered normal.
- A fasting plasma glucose level between 100-126 mg/dL is considered as glucose intolerant or pre diabetic. A fasting and post-prandial blood sugar test (after consumption of 75 gm of glucose) is recommended for all such patients.
- A fasting plasma glucose level of above 126 mg/dL is highly suggestive of a diabetic state. A repeat fasting test is strongly recommended for all such patients. A fasting plasma glucose level in excess of 126 mg/dL on both the occasions is confirmatory of a diabetic state.

Calcium	9.20	mg/dL	8.6-10.2	NM-BAPTA

DESCRIPTION

About 50% of the calcium present in circulation is free (also known as ionized calcium); 40% of serum calcium is bound to proteins, especially albumin (80%) and, secondary, to globulins (20%); and about 10% exists as various small diffusible inorganic and organic anions (eg, bicarbonate, lactate, citrate).Heart and skeletal muscle contractility are affected by calcium ions; in addition, calcium ions are vital to nervous system function and are associated with blood clotting and bone mineralization.The concentration of serum calcium is tightly regulated by parathyroid hormone (PTH) and 1,25-hydroxy vitamin D.

INTERPRETATION-

Serum calcium is decreased (*hypocalcemia*) in the following conditions:

Hypoparathyroidism , Vitamin D deficiency ,Chronic renal diseases ,Pseudohypoparathyroidism, Magnesium deficiency (PTH glandular release is magnesium-dependent), Hyperphosphatemia, Massive transfusion, Hypoalbuminemia, Severe calcium dietary deficiency and Severe pancreatitis (calcium saponification)

Serum calcium is increased(*Hypercalcemia*) in the following conditions:

Hyperparathyroidism ,Vitamin D excess, Milk-alkali syndrome, Multiple myeloma, owing to bone lesions, Paget disease of bone with prolonged immobilization, Sarcoidosis, Familial hypocalciuria hypercalcemia,Vitamin A intoxication,Thyrotoxicosis and Addison disease

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UHID/MR No	: APRJ.0000047935	Report Date	: 16/Jul/2024 05:26PM
Visit ID	**: MPRJ48282**	Client Code	: UP396MH
Ref Doctor	: Dr.SELF	Barcode No	: B7223598
Client Name	: ROZY PATHOLOGY	Ref Customer	: SELF

DEPARTMENT OF BIOCHEMISTRY

SWASTHYA CARE IV

Test Name	Result	Unit	Bio. Ref. Range	Method
EGFR (ESTIMATED GLOMERULAR FILTRATION RATE)				
Creatinine	**10.89**	mg/dL	0.60-1.20	Spectro-photometry
Blood Urea Nitrogen (BUN)	**43.92**	mg/dl	6.00-20.0	Spectro-photometry
Albumin (Serum)	4.15	g/dL	3.5-5.5	Bromo Cresol Green (BCG)
Gfr By Mdrd	3.91	mL/min/1.73 m2		Spectrophotometric - Calculated

Please correlate clinically.

COMMENT-The Kidney Disease Improving Global Outcomes (KDIGO) guideline defines CKD by the presence of glomerular filtration rate (GFR) <60 mL/min/1.73m2 for >3 months and/or evidence of kidney damage (eg, structural abnormalities, histologic abnormalities, albuminuria, urinary sediment abnormalities, renal tubular disorders, and/or history of kidney transplantation) for >3months.2 Thus, monitoring should include tests for GFR, albuminuria, and urine sediment.

CLINICAL USE-

- Detect chronic kidney disease (CKD) in adults.
- Monitor CKD therapy and/or progression in adults.

Interpretation of eGFR Values	
eGFR (mL/min/1.73m^2)	**Interpretation**
90	Normal
60-89	Mild decrease
45-59	Mild to moderate decrease
30-44	Moderate to severe decrease
15-29	Severe decrease
<15	Kidney failure

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Laboratory Test Report

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Client Name	: ROZY PATHOLOGY	Ref Customer	: SELF

DEPARTMENT OF BIOCHEMISTRY

SWASTHYA CARE IV

Test Name	Result	Unit	Bio. Ref. Range	Method
KIDNEY FUNCTION TEST (KFT)				
Sample Type : SERUM				
Urea	94	mg/dl	13.0-43.0	Spectro-photometry
Creatinine	10.79	mg/dL	0.60-1.20	Spectro-photometry
Uric Acid	3.37	mg/dl	2.30-6.60	Spectro-photometry
Sodium (NA+)	140.00	mmol/L	135.0-145.0	Ion Selective Electrode
Potassium (K+)	4.99	mmol/L	3.50-5.50	Ion Selective Electrode
Chloride	109.00	mmol/L	98-109	Ion Selective Electrode

Result rechecked, kindly correlate clinically

Interpretation:- Kidney blood tests, or Kidney function tests, are used to detect and diagnose disease of the Kidney.

The higher the blood levels of urea and creatinine, the less well the kidneys are working.
The level of creatinine is usually used as a marker as to the severity of kidney failure. (Creatinine in itself is not harmful, but a high level indicates that the kidneys are not working properly. So, many other waste products will not be cleared out of the bloodstream.) You normally need treatment with dialysis if the level of creatinine goes higher than a certain value.
Dehydration can also be a come for increases in urea level.
Before and after starting treatment with certain medicines. Some medicines occasionally cause kidney damage (Nephrotoxic Drug) as a side-effect. Therefore, kidney function is often checked before and after starting treatment with certain medicines.

*** End Of Report ***

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UHID/MR No	: APRJ.0000047935	Report Date	: 16/Jul/2024 01:38PM
Visit ID	: **MPRJ48282**	Client Code	: UP396MH
Ref Doctor	: Dr.SELF	Barcode No	: B7223600
Client Name	: ROZY PATHOLOGY	Ref Customer	: SELF

DEPARTMENT OF HAEMATOLOGY

SWASTHYA CARE IV

Test Name	Result	Unit	Bio. Ref. Range	Method
Erythrocyte Sedimentation Rate (ESR)	98	mm/h	0-20	Westergren
Please correlate clinically.				

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DEPARTMENT OF BIOCHEMISTRY

SWASTHYA CARE IV

Test Name	Result	Unit	Bio. Ref. Range	Method
LIVER FUNCTION TEST (LFT)-EXTENDED				
Sample Type : SERUM				
Bilirubin Total	0.65	mg/dl	<1.1	Diazotized Sulfanilic
Bilirubin Direct	0.18	mg/dl	0-0.3	Diazotized Sulfanilic
Bilirubin Indirect	0.47	mg/dl	0.30-1.00	Calculated
SGOT (AST)	13.4	U/L	<31.0	IFCC without pyridoxal phosphate
SGPT (ALT)	11.8	U/L	<33.0	IFCC without pyridoxal phosphate
Alkaline Phosphatase (ALP)	**157.4**	U/L	35-104	Spectrophotometry
Gamma Glutamyl Transferase (GGT)	19.6	U/L	05-40	L-Gamma-glutamyl-3-carboxy-4-nitroanilide Substrate
Protein Total	7.81	g/dL	6.6-8.7	Biuret
Albumin (Serum)	4.15	g/dL	3.5-5.5	Bromo Cresol Green (BCG)
Globulin	**3.66**	g/dL	2.50-3.50	Calculated
A/G Ratio	**1.13**		1.5-2.5	Calculated

Interpretation:- Liver blood tests, or liver function tests, are used to detect and diagnose disease or inflammation of the liver. Elevated aminotransferase (ALT, AST) levels are measured as well as alkaline phosphatase, albumin, and bilirubin. Some diseases that cause abnormal levels of ALT and AST include hepatitis A, B, and C, cirrhosis, iron overload, and Tylenol liver damage. Medications also cause elevated liver enzymes. There are less common conditions and diseases that also cause elevated liver enzyme levels.: Liver blood tests, or liver function tests, are used to detect and diagnose disease or inflammation of the liver. Elevated aminotransferase (ALT, AST) levels are measured as well as alkaline phosphatase, albumin, and bilirubin. Some diseases that cause abnormal levels of ALT and AST include hepatitis A, B, and C, cirrhosis, iron overload, and Tylenol liver damage. Medications also cause elevated liver enzymes.There are less common conditions and diseases that also cause elevated liver enzyme levels.

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Client Name	: ROZY PATHOLOGY	Ref Customer	: SELF

DEPARTMENT OF BIOCHEMISTRY

SWASTHYA CARE IV

Test Name	Result	Unit	Bio. Ref. Range	Method
LIPID PROFILE BASIC				
Sample Type : SERUM				
Total Cholesterol	168.7	mg/dL	<200.00 mg/dL	Enzymatic Colorimetric
Triglyceride	149.6	mg/dL	0.0-150 :Normal 151-199:Border Line >=200 :High 200.0-499.0 High ~> 500 Very High	Enzymatic Colorimetric
HDL Cholesterol	**31.5**	mg/dL	40-60	Direct (PVS/PEGME precipitation & Trinder reaction)
Non HDL Cholesterol	137.20	mg/dL	< 130 mg/dL	Calculated
VLDL Cholesterol	29.9	mg/dL	2.00-30.00	Calculated
LDL Cholesterol	107.28	mg/dL	0-130 :Normal~131-155:Borderline~>=160 :High	Direct (PVS/PEGME precipitation & Trinder reaction)
Cholesterol/HDL Ratio	**5.36**	Ratio	<4.00	Calculated
LDL / HDL Cholestrol Ratio	3.41	Ratio	<3.50	Calculated
HDL/LDL Cholesterol Ratio	0.29	Ratio	<3.50	Calculated

Total Cholesterol (mg/dL) <200 – Desirable 200-239 -Borderline high <240 – High
HDL Cholesterol (mg/dL), <40 – Low >60 – High
LDL Cholesterol (mg/dL) <100 Optimal
[Primary Target of Therapy] 100-129 Near optimal /above optimal, 130-159 Borderline high,160-189 High,>190 Very high.Serum Triglycerides (mg/dL) <150 Normal,150-199 Borderline high,200-499 High,>500 Very high
NCEP recommends lowering of LDL Cholesterol as the primary therapeutic target with lipid lowering agents, however, if triglycerides remain >200 mg/dL after LDL goal is Reached, seti secondary goal for non-HDL cholesterol (total minus HDL) 30 mg/dL higher than LDL goal.

Risk Category	LDL Goal (mg/dL)	Non-HDL Goal (mg/dL)
CHD and CHD Risk Equivalent	<100	<130
(10-year risk for CHD>20%)		
Multiple (2+) Risk Factors and	<130	<160
10-year risk <20%		
0-1 Risk Factor	<160	<190

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UHID/MR No	: APRJ.0000047935	Report Date	: 16/Jul/2024 04:06PM
Visit ID	**: MPRJ48282**	Client Code	: UP396MH
Ref Doctor	: Dr.SELF	Barcode No	: B7223598
Client Name	: ROZY PATHOLOGY	Ref Customer	: SELF

DEPARTMENT OF IMMUNOASSAY

SWASTHYA CARE IV

Test Name	Result	Unit	Bio. Ref. Range	Method
THYROID PROFILE				
Sample Type : SERUM				
Triiodothyronine Total (T3)	**0.67**	ng/mL	0.81-1.81	Chemiluminescence Immunoassay (CLIA)
Thyroxine Total (T4)	5.2	ug/dL	4.6-10.5	Chemiluminescence Immunoassay (CLIA)
TSH (4th Generation)	**5.928**	ulU/mL	0.40-4.20	Chemiluminescence Immunoassay (CLIA)

PREGNANCY	REFERENCE RANGE for TSH IN ulU/mL (As per American Thyroid Association)
1st Trimester	0.10-2.50 ulU/mL
2nd Trimester	0.20-3.00 ulU/mL
3rd Trimester	0.30-3.00 ulU/mL

INTERPRETATION-

1. Primary hyperthyroidism is accompanied by elevated serum T3 & T4 values along with depressed TSH level.
2. Primary hypothyroidism is accompanied by depressed serum T3 and T4 values & elevated serum TSH levels.
3. Normal T4 levels accompanied by high T3 levels and low TSH are seen in patients with T3 thyrotoxicosis.
4. Normal or low T3 & high T4 levels indicate T4 thyrotoxicosis (problem is conversion of T4 to T3)
5. Normal T3 & T4 along with low TSH indicate mild / subclinical HYPERTHYROIDISM .
6. Normal T3 & low T4 along with high TSH is seen in HYPOTHYROIDISM .
7. Normal T3 & T4 levels with high TSH indicate Mild / Subclinical HYPOTHYROIDISM .
8. Slightly elevated T3 levels may be found in pregnancy and in estrogen therapy while depressed levels may be encountered in severe illness , malnutrition , renal failure and during therapy with drugs like propanolol.
9. Although elevated TSH levels are nearly always indicative of primary hypothroidism , rarely they can result from TSH secreting pituitary tumours (seconday hyperthyroidism)

TSH IS DONE BY ULTRASENSITIVE 4th GENERATION CHEMIFLEX ASSAY

COMMENTS:

Assay results should be interpreted in context to the clinical condition and associated results of other investigations. Previous treatment with corticosteroid therapy may result in lower TSH levels while thyroid hormone levels are normal. Results are invalidated if the client has undergone a radionuclide scan within 7-14 days before the test. Abnormal thyroid test findings often found in critically ill clients should be repeated after the critical nature of the condition is resolved.The production, circulation, and disintegration of thyroid hormones are altered throughout the stages of pregnancy.

NOTE-TSH levels are subject to circardian variation reaching peak levels between 2-4AM and minimum between 6-10 PM. The variation is the order of 50% hence time of the day has influence on the measured serum TSH concentration Dose and time of drug intake also influence the test result. Reference ranges are from Teits fundamental of clinical chemistry 5th ed

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Visit ID	**: MPRJ48282**	Client Code	: UP396MH
Ref Doctor	: Dr.SELF	Barcode No	: B7223591
Client Name	: ROZY PATHOLOGY	Ref Customer	: SELF

DEPARTMENT OF CLINICAL PATHOLOGY

SWASTHYA CARE IV

Test Name	Result	Unit	Bio. Ref. Range	Method
URINE EXAMINATION ROUTINE				
Gross Examination(Physical Examination)				
Colour	PALE YELLOW		Colourless	
Appearance	SLIGHTLY TURBID		Clear	
Chemical Examination				
Ph	5.0		4.6-8.0	Double Indicators Test
Specific Gravity	1.020		1.005-1.030	Refractometric
Urine Protein.	++		NEGATIVE	Protein Error of Indicator
Urine Glucose.	NEGATIVE		NEGATIVE	Oxidase Peroxidase Reaction
Ketone	NEGATIVE		NEGATIVE	Sodium Nitropruside
Nitrite	PRESENT		NEGATIVE	Diazotisation Reaction
Blood	NEGATIVE		NEGATIVE	Peroxidase Reaction
Urobilinogen	NORMAL		NORMAL	Modified Ehrlich Reaction
Urine Bilirubin	NIL		NEGATIVE	Diazotisation
Leukocyte	NEGATIVE		NEGATIVE	Diazonization Reaction
Microscopic Examination(Light Microscopy)				
R.B.C.	NIL	/HPF	NIL	Light Microscopy
Pus Cells	45-50	/HPF	0-3	
Epithelial Cells	2-4	/HPF	0-3	
Casts	NIL		NIL	
Crystals	NIL		NIL	
Bacteria	PRESENT		NIL	
Budding yeast Cells	NIL		NIL	

Note: Urine Culture and Sensitivity is advised in case Pus cells are 10 or above with Nitrite positive.

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