

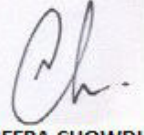
Lab No. : HWH/23-01-2023/SR7209952
Patient Name : MAHATO RAJU KR
Age : 33 Y 0 M 0 D
Gender : M

Lab Add. : Newtown, Kolkata-700156
Ref Dr. : Dr.MEDICAL OFFICER
Collection Date: 23/Jan/2023 11:04AM
Report Date : 24/Jan/2023 01:20PM



Test Name	Result	Unit	Bio Ref. Interval	Method
URIC ACID, URINE, SPOT URINE				
URIC ACID, SPOT URINE	33.00	mg/dL	37-92 mg/dL	URICASE
<i>ESTIMATED TWICE</i>				

□


Dr NEEPA CHOWDHURY
 MBBS MD (Biochemistry)
 Consultant Biochemist



Lab No. : SR7209952 Name : MAHATO RAJU KR Age/G : 33 Y 0 M 0 D / M Date : 23-01-2023

BILIRUBIN (DIRECT) , GEL SERUM

BILIRUBIN (DIRECT) 0.10 mg/dL <0.2 mg/dL Vanadate oxidation

POTASSIUM, BLOOD , GEL SERUM

POTASSIUM,BLOOD 4.80 mEq/L 3.5-5.5 mEq/L ISE INDIRECT

UREA,BLOOD , GEL SERUM

UREA,BLOOD 19.3 mg/dL 19-49 mg/dL Urease with GLDH

GLUCOSE, FASTING , BLOOD, NAF PLASMA

GLUCOSE,FASTING 96 mg/dL Impaired Fasting-100-125
 .~Diabetes- >= 126,~Fasting is defined as no caloric intake for at least 8 hours. Gluc Oxidase Trinder

In the absence of unequivocal hyperglycemia, diagnosis requires two abnormal test results from the same sample or in two separate test samples.

Reference :
 ADA Standards of Medical Care in Diabetes – 2020. Diabetes Care Volume 43, Supplement 1.

URIC ACID, BLOOD , GEL SERUM

URIC ACID,BLOOD **7.70** mg/dL 3.5-7.2 mg/dL Uricase/Peroxidase

THYROID PANEL (T3, T4, TSH) , GEL SERUM

T3-TOTAL (TRI IODOTHYRONINE) 1.13 ng/ml 0.60-1.81 ng/ml CLIA
 T4-TOTAL (THYROXINE) 8.0 µg/dL 3.2-12.6 µg/dL CLIA
 TSH (THYROID STIMULATING HORMONE) 2.60 µIU/mL 0.55-4.78 µIU/mL CLIA

Serum TSH levels exhibit a diurnal variation with the peak occurring during the night and the nadir, which approximates to 50% of the peak value, occurring between 1000 and 1600 hours.[1,2]

References:

1. Bugalho MJ, Domingues RS, Pinto AC, Garrao A, Catarino AL, Ferreira T, Limbert E and Sobrinho L. Detection of thyroglobulin mRNA transcripts in peripheral blood of individuals with and without thyroid glands: evidence for thyroglobulin expression by blood cells. *Eur J Endocrinol* 2001;145:409-13.
2. Bellantone R, Lombardi CP, Bossola M, Ferrante A,Princi P, Boscherini M et al. Validity of thyroglobulin mRNA assay in peripheral blood of postoperative thyroid carcinoma patients in predicting tumor recurrence varies according to the histologic type: results of a prospective study. *Cancer* 2001;92:2273-9.

BIOLOGICAL REFERENCE INTERVAL: [ONLY FOR PREGNANT MOTHERS]

Trimester specific TSH LEVELS during pregnancy:

FIRST TRIMESTER: 0.10 – 3.00 µ IU/mL
 SECOND TRIMESTER: 0.20 -3.50 µ IU/mL
 THIRD TRIMESTER : 0.30 -3.50 µ IU/mL

References:

1. Erik K. Alexander, Elizabeth N. Pearce, Gregory A. Brent, Rosalind S. Brown, Herbert Chen, Chrysoula Dosiou, William A. Grobman, Peter Laurberg, John H. Lazarus, Susan J. Mandel, Robin P. Peeters, and Scott Sullivan. *Thyroid*. Mar 2017.315-389. <http://doi.org/10.1089/thy.2016.0457>
2. Kalra S, Agarwal S, Aggarwal R, Ranabir S. Trimester-specific thyroid-stimulating hormone: An indian perspective. *Indian J Endocr Metab* 2018;22:1-4.



Lab No. : SR7209952 Name : MAHATO RAJU KR Age/G : 33 Y 0 M 0 D / M Date : 23-01-2023

ALKALINE PHOSPHATASE , GEL SERUM

ALKALINE PHOSPHATASE 72.00 U/L 46-116 U/L IFCC standardization

CREATININE, BLOOD

0.84 mg/dL 0.7-1.3 mg/dL Jaffe, alkaline picrate, kinetic


CHLORIDE, BLOOD , .

CHLORIDE,BLOOD 107.00 mEq/L 99-109 mEq/L ISE INDIRECT

SODIUM, BLOOD , GEL SERUM

SODIUM,BLOOD 139.00 mEq/L 132 - 146 mEq/L ISE INDIRECT

□


Dr NEEPA CHOWDHURY
MBBS MD (Biochemistry)
Consultant Biochemist



Lab No. : SR7209952

Name : MAHATO RAJU KR

Age/G : 33 Y 0 M 0 D / M

Date : 23-01-2023

URINE ROUTINE ALL, ALL , URINE

PHYSICAL EXAMINATION

COLOUR PALE YELLOW
APPEARANCE SLIGHTLY HAZY

CHEMICAL EXAMINATION

pH	5.0	4.6 - 8.0	Dipstick (triple indicator method)
SPECIFIC GRAVITY	1.015	1.005 - 1.030	Dipstick (ion concentration method)
PROTEIN	NOT DETECTED	NOT DETECTED	Dipstick (protein error of pH indicators)/Manual
GLUCOSE	NOT DETECTED	NOT DETECTED	Dipstick(glucose-oxidase-peroxidase method)/Manual
KETONES (ACETOACETIC ACID, ACETONE)	NOT DETECTED	NOT DETECTED	Dipstick (Legals test)/Manual
BLOOD	NOT DETECTED	NOT DETECTED	Dipstick (pseudoperoxidase reaction)
BILIRUBIN	NEGATIVE	NEGATIVE	Dipstick (azo-diazo reaction)/Manual
UROBILINOGEN	NEGATIVE	NEGATIVE	Dipstick (diazonium ion reaction)/Manual
NITRITE	NEGATIVE	NEGATIVE	Dipstick (Griess test)
LEUCOCYTE ESTERASE	NEGATIVE	NEGATIVE	Dipstick (ester hydrolysis reaction)

MICROSCOPIC EXAMINATION

LEUKOCYTES (PUS CELLS)	0-1	/hpf	0-5	Microscopy
EPITHELIAL CELLS	0-1	/hpf	0-5	Microscopy
RED BLOOD CELLS	NOT DETECTED	/hpf	0-2	Microscopy
CAST	NOT DETECTED		NOT DETECTED	Microscopy
CRYSTALS	NOT DETECTED		NOT DETECTED	Microscopy
BACTERIA	NOT DETECTED		NOT DETECTED	Microscopy
YEAST	NOT DETECTED		NOT DETECTED	Microscopy

Note:

- All urine samples are checked for adequacy and suitability before examination.
- Analysis by urine analyzer of dipstick is based on reflectance photometry principle. Abnormal results of chemical examinations are confirmed by manual methods.
- The first voided morning clean-catch midstream urine sample is the specimen of choice for chemical and microscopic analysis.
- Negative nitrite test does not exclude urinary tract infections.
- Trace proteinuria can be seen in many physiological conditions like exercise, pregnancy, prolonged recumbency etc.
- False positive results for glucose, protein, nitrite, urobilinogen, bilirubin can occur due to use of certain drugs, therapeutic dyes, ascorbic acid, cleaning agents used in urine collection container.
- Discrepancy between results of leukocyte esterase and blood obtained by chemical methods with corresponding pus cell and red blood cell count by microscopy can occur due to cell lysis.
- Contamination from perineum and vaginal discharge should be avoided during collection, which may falsely elevate epithelial cell count and show presence of bacteria and/or yeast in the urine.

CBC WITH PLATELET & RETICULOCYTE COUNT , EDTA WHOLE BLOOD

HEMOGLOBIN	14.3	g/dL	13 - 17	PHOTOMETRIC
WBC	6.3	*10 ³ /μL	4 - 10	DC detection method
RBC	5.09	*10 ⁶ /μL	4.5 - 5.5	DC detection method
PLATELET (THROMBOCYTE) COUNT	194	*10 ³ /μL	150 - 450*10 ³ /μL	DC detection method/Microscopy

DIFFERENTIAL COUNT

NEUTROPHILS	57	%	40 - 80 %	Flowcytometry/Microscopy
LYMPHOCYTES	35	%	20 - 40 %	Flowcytometry/Microscopy
MONOCYTES	05	%	2 - 10 %	Flowcytometry/Microscopy
EOSINOPHILS	03	%	1-6%	Flowcytometry/Microscopy
BASOPHILS	00	%	0-0.9%	Flowcytometry/Microscopy

CBC SUBGROUP 1

Lab No. : HWH/23-01-2023/SR7209952

Page 4 of 12



Lab No. : SR7209952	Name : MAHATO RAJU KR	Age/G : 33 Y 0 M 0 D / M	Date : 23-01-2023	
HEMATOCRIT / PCV	43.6	%	40 - 50 %	Calculated
MCV	85.6	fl	83 - 101 fl	Calculated
MCH	28.1	pg	27 - 32 pg	Calculated
MCHC	32.8	gm/dl	31.5-34.5 gm/dl	Calculated
RDW - RED CELL DISTRIBUTION WIDTH	15.0	%	11.6-14%	Calculated
RETICULOCYTE COUNT-AUTOMATED,BLOOD	1.4	%	0.5-2.5%	Cell Counter/Microscopy

ESR (ERYTHROCYTE SEDIMENTATION RATE) , EDTA WHOLE BLOOD

1stHour	26	mm/hr	0.00 - 20.00 mm/hr	Westergren
---------	-----------	-------	--------------------	------------

BLOOD GROUP ABO+RH [GEL METHOD] , EDTA WHOLE BLOOD

ABO	B	Gel Card
RH	POSITIVE	Gel Card

TECHNOLOGY USED: GEL METHOD

ADVANTAGES :

- Gel card allows simultaneous forward and reverse grouping.
- Card is scanned and record is preserved for future reference.
- Allows identification of Bombay blood group.
- Daily quality controls are run allowing accurate monitoring.

Historical records check not performed.

Dr. PANKTI PATEL
MBBS , MD (PATHOLOGY)
CONSULTANT PATHOLOGIST



Lab No. : SR7209952 Name : MAHATO RAJU KR Age/G : 33 Y 0 M 0 D / M Date : 24-01-2023

SGPT/ALT , GEL SERUM

SGPT/ALT **108.00** U/L 7-40 U/L Modified IFCC

CALCIUM, BLOOD

CALCIUM,BLOOD 9.30 mg/dL 8.7-10.4 mg/dL Arsenazo III

LIPID PROFILE , GEL SERUM

CHOLESTEROL-TOTAL	205.00	mg/dL	Desirable: < 200 mg/dL Borderline high: 200-239 mg/dL High: > or =240 mg/dL	Enzymatic
TRIGLYCERIDES	119.00	mg/dL	Normal:: < 150, BorderlineHigh::150-199, High:: 200-499, VeryHigh::>500	GPO-Trinder
HDL CHOLESTEROL	35.00	mg/dl	< 40 - Low 40-59- Optimum 60 - High	Elimination/catalase
LDL CHOLESTEROL DIRECT	146.0	mg/dL	OPTIMAL : <100 mg/dL, Near optimal/ above optimal : 100-129 mg/dL, Borderline high : 130-159 mg/dL, High : 160-189 mg/dL, Very high : >=190 mg/dL	Calculated
VLDL	24	mg/dl	< 40 mg/dl	Calculated
CHOL HDL Ratio	5.9		LOW RISK 3.3-4.4 AVERAGE RISK 4.47-7.1 MODERATE RISK 7.1-11.0 HIGH RISK >11.0	Calculated

Reference: National Cholesterol Education Program. Executive summary of the third report of The National Cholesterol Education Program (NCEP) Expert Panel on detection, evaluation, and treatment of high blood cholesterol in adults (Adult Treatment Panel III). JAMA. May 16 2001;285(19):2486-97.

SGOT/AST , GEL SERUM

SGOT/AST **60.00** U/L 13-40 U/L Modified IFCC

TOTAL PROTEIN [BLOOD] ALB:GLO RATIO , .

TOTAL PROTEIN	7.20	g/dL	5.7-8.2 g/dL	BIURET METHOD
ALBUMIN	4.7	g/dL	3.2-4.8 g/dL	BCG Dye Binding
GLOBULIN	2.50	g/dl	1.8-3.2 g/dl	Calculated
AG Ratio	1.88		1.0 - 2.5	Calculated

BILIRUBIN (TOTAL) , GEL SERUM

BILIRUBIN (TOTAL) 0.50 mg/dL 0.3-1.2 mg/dL Vanadate oxidation

[PDF Attached](#)

GLYCATED HAEMOGLOBIN (HBA1C) , EDTA WHOLE BLOOD

GLYCATED HEMOGLOBIN (HBA1C)	5.4	%	***FOR BIOLOGICAL REFERENCE INTERVAL DETAILS , PLEASE REFER TO THE BELOW MENTIONED REMARKS/NOTE WITH ADDITIONAL CLINICAL INFORMATION ***	
HbA1c (IFCC)	35.0	mmol/mol		HPLC

Clinical Information and Laboratory clinical interpretation on Biological Reference Interval:

Low risk / Normal / non-diabetic : <5.7% (NGSP) / < 39 mmol/mol (IFCC)
Pre-diabetes/High risk of Diabetes : 5.7%- 6.4% (NGSP) / 39 - < 48 mmol/mol (IFCC)
Diabetics-HbA1c level : >/= 6.5% (NGSP) / > 48 mmol/mol (IFCC)

Analyzer used : Bio-Rad-VARIANT TURBO 2.0

Lab No. : HWH/23-01-2023/SR7209952

Page 6 of 12



Lab No. : SR7209952 Name : MAHATO RAJU KR Age/G : 33 Y 0 M 0 D / M Date : 24-01-2023

Method : HPLC Cation Exchange

Recommendations for glycemc targets

- Ø Patients should use self-monitoring of blood glucose (SMBG) and HbA1c levels to assess glycemc control.
- Ø The timing and frequency of SMBG should be tailored based on patients' individual treatment, needs, and goals.
- Ø Patients should undergo HbA1c testing at least twice a year if they are meeting treatment goals and have stable glycemc control.
- Ø If a patient changes treatment plans or does not meet his or her glycemc goals, HbA1c testing should be done quarterly.
- Ø **For most adults who are not pregnant, HbA1c levels should be <7% to help reduce microvascular complications and macrovascular disease . Action suggested >8% as it indicates poor control.**
- Ø Some patients may benefit from HbA1c goals that are stringent.

Result alterations in the estimation has been established in many circumstances, such as after acute/ chronic blood loss, for example, after surgery, blood transfusions, hemolytic anemia, or high erythrocyte turnover; vitamin B₁₂/ folate deficiency, presence of chronic renal or liver disease; after administration of high-dose vitamin E / C; or erythropoietin treatment.

Reference: Glycated hemoglobin monitoring BMJ 2006; 333;586-8

References:

1. Chamberlain JJ, Rhinehart AS, Shaefer CF, et al. Diagnosis and management of diabetes: synopsis of the 2016 American Diabetes Association Standards of Medical Care in Diabetes. *Ann Intern Med.* Published online 1 March 2016. doi:10.7326/M15-3016.
2. Mosca A, Goodall I, Hoshino T, Jeppsson JO, John WG, Little RR, Miedema K, Myers GL, Reinauer H, Sacks DB, Weykamp CW. International Federation of Clinical Chemistry and Laboratory Medicine, IFCC Scientific Division. Global standardization of glycated hemoglobin measurement: the position of the IFCC Working Group. *Clin Chem Lab Med.* 2007;45(8):1077-1080.

PHOSPHORUS-INORGANIC, BLOOD , GEL SERUM

PHOSPHORUS-INORGANIC,BLOOD	3.5	mg/dL	2.4-5.1 mg/dL	Phosphomolybdate/UV
----------------------------	-----	-------	---------------	---------------------

GLUCOSE, PP , BLOOD, NAF PLASMA

GLUCOSE,PP	92*	mg/dL	Impaired Glucose Tolerance-140 to 199. Diabetes>= 200.	Gluc Oxidase Trinder
------------	-----	-------	---	----------------------

**Blood glucose level is maintained by a very complex integrated mechanism involving critical interplay of release of hormones and action of enzymes on key metabolic pathways resulting in a smooth transition normally from a high level of glucose influx following meal / glucose intake to a basal level after 2 – 3 hrs. or so. Excluding alimentary hypoglycemia, renal glycosuria, hereditary fructose intolerance and Galactosemia, the possible causes of post prandial reactive hypoglycemia (PRH) include high insulin sensitivity, exaggerated response of insulin and glucagon like peptide 1, defects in counter-regulation, very lean and/or anxious individuals, after massive weight reduction etc.*

The test should be performed as described by the WHO, using a glucose load containing the equivalent of 75-g anhydrous glucose dissolved in water. In the absence of unequivocal hyperglycemia, diagnosis requires two abnormal test results from the same sample or in two separate test samples.

Reference :
ADA Standards of Medical Care in Diabetes – 2020. *Diabetes Care* Volume 43, Supplement 1.

DR. ANANNYA GHOSH
MBBS, MD (Biochemistry)
Consultant Biochemist

Lab No. : HWH/23-01-2023/SR7209952
Patient Name : MAHATO RAJU KR
Age : 33 Y 0 M 0 D
Gender : M

Lab Add. :
Ref Dr. : Dr.MEDICAL OFFICER
Collection Date:
Report Date : 23/Jan/2023 11:25AM



E.C.G. REPORT

DATA	
HEART RATE	69 Bpm
PR INTERVAL	158 Ms
QRS DURATION	74 Ms
QT INTERVAL	340 Ms
QTC INTERVAL	366 Ms
AXIS	
P WAVE	34 Degree
QRS WAVE	19 Degree
T WAVE	14 Degree
IMPRESSION	: SINUS RHYTHM, NORMAL ECG.

ACR

Dr. A C RAY

Department of Non-invasive
Cardiology

Lab No. : HWH/23-01-2023/SR7209952
Patient Name : MAHATO RAJU KR
Age : 33 Y 0 M 0 D
Gender : M

Lab Add. :
Ref Dr. : Dr.MEDICAL OFFICER
Collection Date:
Report Date : 23/Jan/2023 02:01PM




X-RAY REPORT OF CHEST (PA)

FINDINGS :

No active lung parenchymal lesion is seen.
Both the hila are normal in size, density and position.
Mediastinum is in central position. Trachea is in midline.
Domes of diaphragm are smoothly outlined. Position is within normal limits.
Lateral costo-phrenic angles are clear.
The cardio-thoracic ratio is normal.
Bony thorax reveals no definite abnormality.

IMPRESSION :

Normal study.


Dr. Anoop Sastry
MBBS, DMRT(CAL)
CONSULTANT RADIOLOGIST
Registration No.: WB-36628

Lab No. : HWH/23-01-2023/SR7209952
Patient Name : MAHATO RAJU KR
Age : 33 Y 0 M 0 D
Gender : M

Lab Add. :
Ref Dr. : Dr.MEDICAL OFFICER
Collection Date:
Report Date : 23/Jan/2023 01:14PM



DEPARTMENT OF ULTRASONOGRAPHY
REPORT ON EXAMINATION OF WHOLE ABDOMEN

LIVER

Liver is mildly enlarged in size (147 mm) with mildly raised parenchymal echotexture. No focal mass lesion is seen in liver. Intrahepatic biliary radicals are not dilated. Portal vein branches and hepatic veins are normal.

GALL BLADDER

Gall bladder is normal in size, shape. No intraluminal calculus or mass is seen. Gall bladder wall is normal in thickness. No pericholecystic fluid collection noted.

COMMON BILE DUCT

Normal in caliber. Wall thickness is normal. Lumen is clear. Measures 3 mm. in porta hepatis.

PORTAL VEIN

Normal in diameter. Lumen is clear. Measures 8 mm. in porta hepatis.

PANCREAS

Pancreas is normal in size, shape and contour. Parenchymal echogenicity is normal and homogeneous. No focal mass or calcification seen. Main pancreatic duct is not dilated. No peripancreatic fluid collection or pseudocyst noted.

SPLEEN

Spleen is normal in size (94 mm), shape, position. Echotexture is normal. No focal lesion is noted. Splenic vein at splenic hilum is normal in calibre. No collateral seen.

KIDNEYS

Both are normal in size, outline and cortical echo texture. Cortico-medullary differentiation is preserved bilaterally. No calculus, hydronephrosis or focal lesion is seen.

Right kidney measures : 93 mm.

Left kidney measures : 102 mm.

URETERS

Both are not dilated. Hence, not visualized.

URINARY BLADDER

Urinary bladder is optimally distended. Wall is normal in thickness. No intraluminal calculus or mass is seen.

PROSTATE

Lab No. : HWH/23-01-2023/SR7209952
Patient Name : MAHATO RAJU KR
Age : 33 Y 0 M 0 D
Gender : M

Lab Add. :
Ref Dr. : Dr.MEDICAL OFFICER
Collection Date:
Report Date : 23/Jan/2023 01:14PM



Prostate is normal in size. Echotexture appears within normal limits. No focal alteration of its echogenicity is seen .

It measures : 33 x 31 x 27 mm. Volume : 14 cc.

RETROPERITONEUM & PERITONEUM

The aorta and IVC are normal. No enlarged lymph nodes are noted in the retroperitoneum. No free fluid is seen in peritoneum.

MISCELLANEOUS

No ascites or pleural effusion is seen.

IMPRESSION:

Mild hepatomegaly with grade I fatty change.

Suggested: Clinical correlation & further needful investigations.

Kindly note

- *Ultrasound is not the modality of choice to rule out subtle bowel lesion.*
- *Please Intimate us for any typing mistakes and send the report for correction within 7 days.*
- *The science of Radiological diagnosis is based on the interpretation of various shadows produced by both the normal and abnormal tissues and are not always conclusive. Further biochemical and radiological investigation & clinical correlation is required to enable the clinician to reach the final diagnosis.?*

The report and films are not valid for medico-legal purpose.

Patient Identity not verified.

Lab No. : HWH/23-01-2023/SR7209952
Patient Name : MAHATO RAJU KR
Age : 33 Y 0 M 0 D
Gender : M

Lab Add. :
Ref Dr. : Dr.MEDICAL OFFICER
Collection Date:
Report Date : 23/Jan/2023 01:14PM



Dr. Ranjit Kumar Gupta
MBBS (KOL)
Consultant Sonologist.

Patient Data

Sample ID: C02135062525
 Patient ID: SR7209952
 Name:
 Physician:
 Sex:
 DOB:

Analysis Data

Analysis Performed: 23/JAN/2023 17:04:39
 Injection Number: 7517U
 Run Number: 188
 Rack ID: 0004
 Tube Number: 6
 Report Generated: 23/JAN/2023 17:15:08
 Operator ID: ASIT

Comments:

Peak Name	NGSP %	Area %	Retention Time (min)	Peak Area
Unknown	---	0.2	0.113	2736
A1a	---	0.8	0.159	10228
A1b	---	1.2	0.222	16420
F	---	0.6	0.272	8182
LA1c	---	1.7	0.400	22573
A1c	5.4	---	0.506	58741
P3	---	3.2	0.781	43190
P4	---	1.2	0.865	16293
Ao	---	86.9	0.997	1182456

Total Area: 1,360,820

HbA1c (NGSP) = 5.4 % HbA1c (IFCC) = 35 mmol/mol

