



Lab No. : CHP/25-02-2023/SR7339230
Patient Name : MAJI RABINDRA NATH
Age : 38 Y 0 M 0 D
Gender : M

Lab Add. : Newtown, Kolkata-700156
Ref Dr. : Dr.MEDICAL OFFICER
Collection Date: 25/Feb/2023 11:48AM
Report Date : 25/Feb/2023 04:03PM



Test Name	Result	Unit	Bio Ref. Interval	Method
PHOSPHORUS-INORGANIC, BLOOD , GEL SERUM				
PHOSPHORUS-INORGANIC,BLOOD	3.3	mg/dL	2.4-5.1 mg/dL	Phosphomolybdate/UV
SODIUM, BLOOD , GEL SERUM				
SODIUM,BLOOD	140.00	mEq/L	132 - 146 mEq/L	ISE INDIRECT
SGPT/ALT , GEL SERUM				
SGPT/ALT	28.00	U/L	7-40 U/L	Modified IFCC
BILIRUBIN (TOTAL) , GEL SERUM				
BILIRUBIN (TOTAL)	0.60	mg/dL	0.3-1.2 mg/dL	Vanadate oxidation
ALKALINE PHOSPHATASE , GEL SERUM				
ALKALINE PHOSPHATASE	89.00	U/L	46-116 U/L	IFCC standardization
UREA,BLOOD , GEL SERUM				
UREA,BLOOD	19.3	mg/dL	19-49 mg/dL	Urease with GLDH
URIC ACID, BLOOD , GEL SERUM				
URIC ACID,BLOOD	9.10	mg/dL	3.5-7.2 mg/dL	Uricase/Peroxidase
BILIRUBIN (DIRECT) , GEL SERUM				
BILIRUBIN (DIRECT)	0.10	mg/dL	<0.2 mg/dL	Vanadate oxidation
SGOT/AST , GEL SERUM				
SGOT/AST	22.00	U/L	13-40 U/L	Modified IFCC
POTASSIUM, BLOOD , GEL SERUM				
POTASSIUM,BLOOD	4.00	mEq/L	3.5-5.5 mEq/L	ISE INDIRECT
*CHLORIDE, BLOOD , .				
CHLORIDE,BLOOD	103.00	mEq/L	99-109 mEq/L	ISE INDIRECT
CREATININE, BLOOD				
CREATININE, BLOOD	1.00	mg/dL	0.7-1.3 mg/dL	Jaffe, alkaline picrate, kinetic

□

Dr NEEPA CHOWDHURY
 MBBS MD (Biochemistry)
 Consultant Biochemist



Lab No. : SR7339230 Name : MAJI RABINDRA NATH Age/G : 38 Y 0 M 0 D / M Date : 25-02-2023

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

T3-TOTAL (TRI IODOTHYRONINE)	1.15	ng/ml	0.60-1.81 ng/ml	CLIA
T4-TOTAL (THYROXINE)	7.8	µg/dL	3.2-12.6 µg/dL	CLIA
TSH (THYROID STIMULATING HORMONE)	2.31	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.

Dr. SUPARBA CHAKRABARTI
MBBS, MD(BIOCHEMISTRY)
Consultant Biochemist



Lab No. : SR7339230

Name : MAJI RABINDRA NATH

Age/G : 38 Y 0 M 0 D / M

Date : 26-02-2023

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	1.020	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:

1. All urine samples are checked for adequacy and suitability before examination.
2. Analysis by urine analyzer of dipstick is based on reflectance photometry principle. Abnormal results of chemical examinations are confirmed by manual methods.
3. The first voided morning clean-catch midstream urine sample is the specimen of choice for chemical and microscopic analysis.
4. Negative nitrite test does not exclude urinary tract infections.
5. Trace proteinuria can be seen in many physiological conditions like exercise, pregnancy, prolonged recumbency etc.
6. 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.
7. 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.
8. 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.

Dr Mansi Gulati
Consultant Pathologist
MBBS, MD, DNB (Pathology)



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ESR (ERYTHROCYTE SEDIMENTATION RATE) , EDTA WHOLE BLOOD

1stHour	10	mm/hr	0.00 - 20.00 mm/hr	Westergren
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BLOOD GROUP ABO+RH [GEL METHOD] , EDTA WHOLE BLOOD

ABO	O			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.

CBC WITH PLATELET & RETICULOCYTE COUNT , EDTA WHOLE BLOOD

HEMOGLOBIN	15.3	g/dL	13 - 17	PHOTOMETRIC
WBC	7.1	*10 ³ /μL	4 - 10	DC detection method
RBC	5.04	*10 ⁶ /μL	4.5 - 5.5	DC detection method
PLATELET (THROMBOCYTE) COUNT	168	*10 ³ /μL	150 - 450*10 ³ /μL	DC detection method/Microscopy

DIFFERENTIAL COUNT

NEUTROPHILS	57	%	40 - 80 %	Flowcytometry/Microscopy
LYMPHOCYTES	34	%	20 - 40 %	Flowcytometry/Microscopy
MONOCYTES	04	%	2 - 10 %	Flowcytometry/Microscopy
EOSINOPHILS	05	%	1-6%	Flowcytometry/Microscopy
BASOPHILS	00	%	0-0.9%	Flowcytometry/Microscopy

CBC SUBGROUP 1

HEMATOCRIT / PCV	41.4	%	40 - 50 %	Calculated
MCV	82.2	fl	83 - 101 fl	Calculated
MCH	30.3	pg	27 - 32 pg	Calculated
MCHC	36.9	gm/dl	31.5-34.5 gm/dl	Calculated
RDW - RED CELL DISTRIBUTION WIDTH	14.5	%	11.6-14%	Calculated
RETICULOCYTE COUNT-AUTOMATED,BLOOD	1.5	%	0.5-2.5%	Cell Counter/Microscopy

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



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GLUCOSE, PP , BLOOD, NAF PLASMA

GLUCOSE,PP	96	mg/dL	Impaired Glucose Tolerance-140 to 199. Diabetes>= 200.	Gluc Oxidase Trinder
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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.

LIPID PROFILE , GEL SERUM

CHOLESTEROL-TOTAL	170.00	mg/dL	Desirable: < 200 mg/dL Borderline high: 200-239 mg/dL High: > or =240 mg/dL	Enzymatic
TRIGLYCERIDES	166.00	mg/dL	Normal:: < 150, BorderlineHigh::150-199, High:: 200-499, VeryHigh::>500	GPO-Trinder
HDL CHOLESTEROL	30.00	mg/dl	< 40 - Low 40-59- Optimum 60 - High	Elimination/catalase
LDL CHOLESTEROL DIRECT	129.0	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	Elimination / Catalase
VLDL	11	mg/dl	< 40 mg/dl	Calculated
CHOL HDL Ratio	5.7		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.

GLUCOSE, FASTING , BLOOD, NAF PLASMA

GLUCOSE,FASTING	77	mg/dL	Impaired Fasting-100-125 . Diabetes- >= 126. Fasting is defined as no caloric intake for at least 8 hours.	Gluc Oxidase Trinder
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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.

CALCIUM, BLOOD

CALCIUM,BLOOD	9.30	mg/dL	8.7-10.4 mg/dL	Arsenazo III
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TOTAL PROTEIN [BLOOD] ALB:GLO RATIO , .

TOTAL PROTEIN	7.00	g/dL	5.7-8.2 g/dL	BIURET METHOD
ALBUMIN	4.6	g/dL	3.2-4.8 g/dL	BCG Dye Binding
GLOBULIN	2.40	g/dl	1.8-3.2 g/dl	Calculated
AG Ratio	1.92		1.0 - 2.5	Calculated

URIC ACID, URINE, SPOT URINE

URIC ACID, SPOT URINE	49.00	mg/dL	37-92 mg/dL	URICASE
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[PDF Attached](#)

GLYCATED HAEMOGLOBIN (HBA1C) , EDTA WHOLE BLOOD

Lab No. : CHP/25-02-2023/SR7339230

Page 5 of 10



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GLYCATED HEMOGLOBIN (HBA1C)	5.3	%	***FOR BIOLOGICAL REFERENCE INTERVAL DETAILS , PLEASE REFER TO THE BELOW MENTIONED REMARKS/NOTE WITH ADDITIONAL CLINICAL INFORMATION ***
HbA1c (IFCC)	34.0	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
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.

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



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Ref Dr. : Dr.MEDICAL OFFICER
Collection Date:
Report Date : 25/Feb/2023 12:46PM



DEPARTMENT OF CARDIOLOGY
REPORT OF E.C.G.

DATA		
HEART RATE	64	Bpm
PR INTERVAL	146	Ms
QRS DURATION	78	Ms
QT INTERVAL	358	Ms
QTC INTERVAL	373	Ms
AXIS		
P WAVE	34	Degree
QRS WAVE	28	Degree
T WAVE	44	Degree
IMPRESSION	: Normal sinus rhythm, within normal limits.	

Dr. SOUMEN MAJUMDAR
Department of Non-invasive
Cardiology



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Report Date : 25/Feb/2023 12:08PM



DEPARTMENT OF ULTRASONOGRAPHY
REPORT ON EXAMINATION OF WHOLE ABDOMEN

LIVER

Liver is enlarged in size (162 mm) having normal shape & shows increased echogenicity. No focal parenchymal lesion is evident. Intrahepatic biliary radicles are not dilated. Branches of portal vein are normal.

PORTA

The appearance of porta is normal. Common Bile duct is 3 mm. with no intraluminal pathology (Calculi/mass) could be detected at its visualised part. Portal vein is normal (10 mm.) at porta.

GALL BLADDER

Gallbladder is physiologically distended. Wall thickness appears normal. No intraluminal pathology (Calculi/mass) could be detected. Sonographic Murphys sign is negative.

PANCREAS

Echogenicity appears within limits, without any focal lesion. Shape, size & position appears normal. No Calcular disease noted. Pancreatic duct is not dilated. No peri-pancreatic collection of fluid noted.

SPLEEN

Spleen is normal in size (86 mm). Homogenous and smooth echotexture without any focal lesion. Splenic vein at hilum appears normal. No definite collaterals could be detected.

KIDNEYS

Both the kidneys are normal in shape, size (Rt. kidney 105 mm. & Lt. kidney 91 mm.) axes & position. Cortical echogenicity appears normal maintaining cortico-medullary & cortico-hepatic differentiation. Margin is regular and cortical thickness is uniform. No calcular disease noted. No hydronephrotic changes detected. Visualised part of upper ureters are not dilated.

URINARY BLADDER

Urinary bladder is distended, wall thickness appeared normal. No intraluminal pathology (calculi/mass) could be detected.

PROSTATE

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

It measures : 37 mm x 34 mm x 28 mm.

Approximate weight could be around =18 gms

RETROPERITONEUM , PERITONEUM & LOWER PLEURAL SPACE

No ascites noted. No definite evidence of any mass lesion detected. No detectable evidence of enlarged lymph nodes noted. Visualised part of aorta & IVC are within normal limit. No effusion noted at costo-phrenic angles.

IMPRESSION



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1. Hepatomegaly with fatty changes (grade - I).
 2. Distended gut.
 3. Probe tenderness + on epigastrium.
- Correlate clinically.

Kindly note

Ø Please Intimate us for any typing mistakes and send the report for correction within 7 days.

Ø 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.

DR GITA BAIDYAA
CONSULTANT SONOLOGIST



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Gender : M

Lab Add. :
Ref Dr. : Dr.MEDICAL OFFICER
Collection Date:
Report Date : 25/Feb/2023 05:35PM



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. SUDIPTA SARKAR
MBBS,MD (Radio- Diagnosis)
DNB (Radio-Diagnosis), MNAMS
EDIR, D-ICRI, FRCR (UK)

Patient Data

Sample ID: C02135003055
 Patient ID: SR7339230
 Name:
 Physician:
 Sex:
 DOB:

Analysis Data

Analysis Performed: 25/FEB/2023 15:09:15
 Injection Number: 4990U
 Run Number: 106
 Rack ID: 0002
 Tube Number: 2
 Report Generated: 25/FEB/2023 15:28:55
 Operator ID: ASIT

Comments:

Peak Name	NGSP %	Area %	Retention Time (min)	Peak Area
A1a	---	1.2	0.152	21870
A1b	---	1.7	0.213	29992
LA1c	---	1.7	0.390	30064
A1c	5.3	---	0.492	76157
P3	---	3.5	0.779	61875
P4	---	1.2	0.859	21882
Ao	---	86.4	0.993	1537305

Total Area: 1,779,145

HbA1c (NGSP) = 5.3 % HbA1c (IFCC) = 34 mmol/mol

