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Suraksha DIAGNOSTICS

Lab No.	: TLG/25-02-2023/SR7337969	**Lab Add.**	: Newtown, Kolkata-700156
Patient Name	: **NILANTA ROY**	**Ref Dr.**	: Dr.MEDICAL OFFICER
Age	: 32 Y 0 M 0 D	**Collection Date**	: 25/Feb/2023 09:16AM
Gender	: M	**Report Date**	: 25/Feb/2023 02:33PM

Test Name	Result	Unit	Bio Ref. Interval	Method
ALKALINE PHOSPHATASE , *GEL SERUM*				
ALKALINE PHOSPHATASE	111.00	U/L	46-116 U/L	IFCC standardization
CREATININE, BLOOD , *GEL SERUM*	0.96	mg/dL	0.7-1.3 mg/dL	Jaffe, alkaline picrate, kinetic
PHOSPHORUS-INORGANIC, BLOOD , *GEL SERUM*				
PHOSPHORUS-INORGANIC,BLOOD	2.7	mg/dL	2.4-5.1 mg/dL	Phosphomolybdate/UV
SGOT/AST , *GEL SERUM*				
SGOT/AST	39.00	U/L	13-40 U/L	Modified IFCC
GLUCOSE, FASTING , *BLOOD, NAF PLASMA*				
GLUCOSE,FASTING	86	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	5.60	mg/dL	3.5-7.2 mg/dL	Uricase/Peroxidase
UREA,BLOOD	21.4	mg/dL	19-49 mg/dL	Urease with GLDH

Dr NEEPA CHOWDHURY
MBBS MD (Biochemistry)
Consultant Biochemist

Lab No. : SR7337969 **Name : NILANTA ROY** **Age/G : 32 Y 0 M 0 D / M** **Date : 25-02-2023**

LIPID PROFILE , *GEL SERUM*

CHOLESTEROL-TOTAL	178.00	mg/dL	Desirable: < 200 mg/dL Borderline high: 200-239 mg/dL High: > or =240 mg/dL	Enzymatic
TRIGLYCERIDES	51.00	mg/dL	Normal:: < 150, BorderlineHigh::150-199, High:: 200-499, VeryHigh::>500	GPO-Trinder
HDL CHOLESTEROL	55.00	mg/dl	< 40 - Low 40-59- Optimum 60 - High	Elimination/catalase
LDL CHOLESTEROL DIRECT	**113.0**	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	10	mg/dl	< 40 mg/dl	Calculated
CHOL HDL Ratio	3.2		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.*

CALCIUM, BLOOD

CALCIUM,BLOOD	8.90	mg/dL	8.7-10.4 mg/dL	Arsenazo III

Dr. SUPARBA CHAKRABARTI
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Lab No. : SR7337969 **Name : NILANTA ROY** **Age/G : 32 Y 0 M 0 D / M** **Date : 25-02-2023**

ESR (ERYTHROCYTE SEDIMENTATION RATE) , *EDTA WHOLE BLOOD*

1stHour	**35**	mm/hr	0.00 - 20.00 mm/hr	Westergren

DR. NEHA GUPTA
MD, DNB (Pathology)
Consultant Pathologist

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Lab No. : SR7337969 **Name : NILANTA ROY** **Age/G : 32 Y 0 M 0 D / M** **Date : 25-02-2023**

CBC WITH PLATELET & RETICULOCYTE COUNT , *EDTA WHOLE BLOOD*

HEMOGLOBIN	15.8	g/dL	13 - 17	PHOTOMETRIC
WBC	4.8	*10^3/µL	4 - 10	DC detection method
RBC	4.92	*10^6/µL	4.5 - 5.5	DC detection method
PLATELET (THROMBOCYTE) COUNT	**130**	*10^3/µL	150 - 450*10^3/µL	DC detection method/Microscopy
DIFFERENTIAL COUNT				
NEUTROPHILS	57	%	40 - 80 %	Flowcytometry/Microscopy
LYMPHOCYTES	33	%	20 - 40 %	Flowcytometry/Microscopy
MONOCYTES	04	%	2 - 10 %	Flowcytometry/Microscopy
EOSINOPHILS	05	%	1 - 6 %	Flowcytometry/Microscopy
BASOPHILS	**01**	%	0-0.9%	Flowcytometry/Microscopy
CBC SUBGROUP 1				
HEMATOCRIT / PCV	47.6	%	40 - 50 %	Calculated
MCV	96.7	fl	83 - 101 fl	Calculated
MCH	32.0	pg	27 - 32 pg	Calculated
MCHC	33.1	gm/dl	31.5-34.5 gm/dl	Calculated
RDW - RED CELL DISTRIBUTION WIDTH	**15.1**	%	11.6-14%	Calculated
RETICULOCYTE COUNT-AUTOMATED,BLOOD	0.9	%	0.5-2.5%	Cell Counter/Microscopy

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.

URINE ROUTINE ALL, ALL , *URINE*

PHYSICAL EXAMINATION			
COLOUR	PALE YELLOW		
APPEARANCE	SLIGHTLY HAZY		
CHEMICAL EXAMINATION			
pH	6.0	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)

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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. PANKTI PATEL
MBBS , MD (PATHOLOGY)
CONSULTANT PATHOLOGIST

Lab No. : SR7337969 **Name : NILANTA ROY** **Age/G : 32 Y 0 M 0 D / M** **Date : 25-02-2023**

BILIRUBIN (TOTAL) , *GEL SERUM*				
BILIRUBIN (TOTAL)	**1.30**	mg/dL	0.3-1.2 mg/dL	Vanadate oxidation
SGPT/ALT , *GEL SERUM*				
SGPT/ALT	**78.00**	U/L	7-40 U/L	Modified IFCC
***CHLORIDE, BLOOD ,** .				
CHLORIDE,BLOOD	106.00	mEq/L	99-109 mEq/L	ISE INDIRECT
TOTAL PROTEIN [BLOOD] ALB:GLO RATIO , .				
TOTAL PROTEIN	6.60	g/dL	5.7-8.2 g/dL	BIURET METHOD
ALBUMIN	4.3	g/dL	3.2-4.8 g/dL	BCG Dye Binding
GLOBULIN	2.30	g/dl	1.8-3.2 g/dl	Calculated
AG Ratio	1.87		1.0 - 2.5	Calculated
SODIUM, BLOOD , *GEL SERUM*				
SODIUM,BLOOD	142.00	mEq/L	132 - 146 mEq/L	ISE INDIRECT
URIC ACID, URINE, SPOT URINE				
URIC ACID, SPOT URINE	66.00	mg/dL	37-92 mg/dL	URICASE

PDF Attached

GLYCATED HAEMOGLOBIN (HBA1C) , *EDTA WHOLE BLOOD*				
GLYCATED HEMOGLOBIN (HBA1C)	4.9	%	***FOR BIOLOGICAL REFERENCE INTERVAL DETAILS , PLEASE REFER TO THE BELOW MENTIONED REMARKS/NOTE WITH ADDITIONAL CLINICAL INFORMATION ***	
HbA1c (IFCC)	30.0	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 glycemic targets
Ø Patients should use self-monitoring of blood glucose (SMBG) and HbA1c levels to assess glycemic 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 glycemic control.
Ø If a patient changes treatment plans or does not meet his or her glycemic 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 B_{12}/ 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.

BILIRUBIN (DIRECT) , *GEL SERUM*

BILIRUBIN (DIRECT)	**0.30**	mg/dL	<0.2 mg/dL	Vanadate oxidation

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

T3-TOTAL (TRI IODOTHYRONINE)	0.79	ng/ml	0.60-1.81 ng/ml	CLIA
T4-TOTAL (THYROXINE)	5.1	µg/dL	3.2-12.6 µg/dL	CLIA
TSH (THYROID STIMULATING HORMONE)	**7.60**	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.*

GLUCOSE, PP , *BLOOD, NAF PLASMA*

GLUCOSE,PP	100	mg/dL	Impaired Glucose Tolerance-140 to 199. Diabetes>= 200.	Gluc Oxidase Trinder

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.

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POTASSIUM, BLOOD , *GEL SERUM*

POTASSIUM,BLOOD	4.20	mEq/L	3.5-5.5 mEq/L	ISE INDIRECT

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Suraksha DIAGNOSTICS

Lab No.	: TLG/25-02-2023/SR7337969	**Lab Add.**	: Tollygunge
Patient Name	: **NILANTA ROY**	**Ref Dr.**	: Dr.MEDICAL OFFICER
Age	: 32 Y 0 M 0 D	**Collection Date:**	
Gender	: M	**Report Date**	: 25/Feb/2023 01:03PM

E.C.G. REPORT

DATA		
HEART RATE	76	Bpm
PR INTERVAL	141	Ms
QRS DURATION	90	Ms
QT INTERVAL	353	Ms
QTC INTERVAL	397	Ms
AXIS		
P WAVE	53	Degree
QRS WAVE	78	Degree
T WAVE	32	Degree
IMPRESSION :	**Sinus rhythm.**	
	ECG is within normal limit.	

DR S S SAHAI
DM (Cardiology)

Lab No.	: TLG/25-02-2023/SR7337969	**Lab Add.**	: Tollygunge
Patient Name	: **NILANTA ROY**	**Ref Dr.**	: Dr.MEDICAL OFFICER
Age	: 32 Y 0 M 0 D	**Collection Date:**	
Gender	: M	**Report Date**	: 25/Feb/2023 12:17PM

DEPARTMENT OF ULTRASONOGRAPHY

REPORT ON EXAMINATION OF WHOLE ABDOMEN

LIVER

Liver is normal (13.2 cm) in size with smooth margins. Parenchymal echotexture of both lobes are normal. No focal mass lesion is seen in liver. Intrahepatic biliary radicals are not dilated. Portal vein branches and hepatic veins are normal.

PORTA

Portal vein is normal in caliber. Common bile duct is not dilated. No intraluminal calculus or soft tissue is seen in CBD.

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.

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 (10.2 cm), shape, position. Echotexture is normal. No focal lesion is noted. Splenic vein at splenic hilum is normal in caliber. No collateral seen.

KIDNEYS

Both the kidneys are normal in size (Right kidney measures : 10.4 cm. and Left kidney measures : 10 cm.), shape and position. Surfaces are smooth. Cortical echogenicity and cortical thickness of both kidneys are normal. Normal cortico-medullary differentiation is maintained. No calculus, mass or hydronephrosis is seen in either kidney.

URETER

Ureters are not dilated.

URINARY BLADDER

Urinary bladder is distended, **wall is mildly thickened and irregular (Approx = 0.63 cm).** No

intraluminal pathology (calculi/mass) could be detected.

Post void residual urine is significant (Volume = 85 cc).

PROSTATE

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

It measures : 2.3 cm x 3.7 cm x 2.4 cm.

Approximate weight = 11 gms.

IMPRESSION:

- **Mild cystitis**
- **Significant post void residual urine**

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.

DR. UDIT KUMAR
MBBS, DNB (Radiology)
Consultant Radiologist

Suraksha DIAGNOSTICS

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Patient Name	: **NILANTA ROY**	**Ref Dr.**	: Dr.MEDICAL OFFICER
Age	: 32 Y 0 M 0 D	**Collection Date:**	
Gender	: M	**Report Date**	: 25/Feb/2023 12:17PM

X-RAY REPORT OF CHEST (PA)

FINDINGS :

Bilateral mildly prominent hilar bronchovascular markings.

No active lung parenchymal lesion is seen.

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 :

Bilateral mildly prominent hilar bronchovascular markings --Infective.

**** Suggested clinical correlation.*

DR. UDIT KUMAR
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Consultant Radiologist

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SURAKSHA DIAGNOSTIC,RAJARHAT,KOLKATA **PATIENT REPORT**
BIO-RAD VARIANT-II TURBO CDM5.4. SN-16122 **V2TURBO_A1c_2.0**

Patient Data

Sample ID:	C02135048027
Patient ID:	SR7337969
Name:	
Physician:	
Sex:	
DOB:	

Comments:

Analysis Data

Analysis Performed:	25/FEB/2023 14:32:43
Injection Number:	3112U
Run Number:	63
Rack ID:	0004
Tube Number:	10
Report Generated:	25/FEB/2023 14:42:49
Operator ID:	anup

Peak Name	NGSP %	Area %	Retention Time (min)	Peak Area
Unknown	---	0.2	0.113	2613
A1a	---	0.8	0.163	14012
A1b	---	0.8	0.222	13397
F	---	1.0	0.273	16952
LA1c	---	1.7	0.399	28961
A1c	4.9	---	0.504	67578
P3	---	3.2	0.784	56070
P4	---	1.2	0.865	20286
Ao	---	87.3	0.999	1512933

Total Area: 1,732,802

HbA1c (NGSP) = 4.9 % HbA1c (IFCC) = 30 mmol/mol