Lab No.	: TLG/17-03-2023/SR7416567	**Lab Add.**	: Newtown, Kolkata-700156
Patient Name	: **ABHISHEK KUMAR SINGH**	**Ref Dr.**	: Dr.MEDICAL OFFICER
Age	: 35 Y 2 M 27 D	**Collection Date**	: 17/Mar/2023 08:45AM
Gender	: M	**Report Date**	: 17/Mar/2023 01:24PM

Test Name	Result	Unit	Bio Ref. Interval	Method

PDF Attached

GLYCATED HAEMOGLOBIN (HBA1C) , *EDTA WHOLE BLOOD*

GLYCATED HEMOGLOBIN (HBA1C)	5.0	%	***FOR BIOLOGICAL REFERENCE INTERVAL DETAILS , PLEASE REFER TO THE BELOW MENTIONED REMARKS/NOTE WITH ADDITIONAL CLINICAL INFORMATION ***	
HbA1c (IFCC)	31.0	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.*

Dr NEEPA CHOWDHURY
MBBS MD (Biochemistry)
Consultant Biochemist

Lab No. : SR7416567 **Name : ABHISHEK KUMAR SINGH** **Age/G : 35 Y 2 M 27 D / M** **Date : 17-03-2023**

SODIUM, BLOOD , *GEL SERUM*				
SODIUM,BLOOD	139	mEq/L	132 - 146 mEq/L	ISE INDIRECT
***CHLORIDE, BLOOD ,** .				
CHLORIDE,BLOOD	104	mEq/L	99-109 mEq/L	ISE INDIRECT
GLUCOSE, FASTING , *BLOOD, NAF PLASMA*				
GLUCOSE,FASTING	78	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.

POTASSIUM, BLOOD , *GEL SERUM*				
POTASSIUM,BLOOD	4.50	mEq/L	3.5-5.5 mEq/L	ISE INDIRECT

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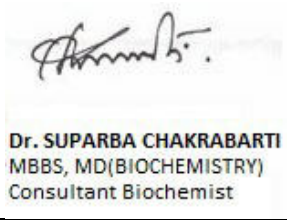
Lab No. : SR7416567 **Name : ABHISHEK KUMAR SINGH** **Age/G : 35 Y 2 M 27 D / M** **Date : 17-03-2023**

LIPID PROFILE , *GEL SERUM*

CHOLESTEROL-TOTAL	186	mg/dL	Desirable: < 200 mg/dL Borderline high: 200-239 mg/dL High: > or =240 mg/dL	Enzymatic
TRIGLYCERIDES	**187**	mg/dL	Normal:: < 150, BorderlineHigh::150-199, High:: 200-499, VeryHigh::>500	GPO-Trinder
HDL CHOLESTEROL	**36**	mg/dl	< 40 - Low 40-59- Optimum 60 - High	Elimination/catalase
LDL CHOLESTEROL DIRECT	**143**	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	7	mg/dl	< 40 mg/dl	Calculated
CHOL HDL Ratio	5.2		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.*



Dr. SUPARBA CHAKRABARTI
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Lab No. : SR7416567 **Name : ABHISHEK KUMAR SINGH** **Age/G : 35 Y 2 M 27 D / M** **Date : 17-03-2023**

CBC WITH PLATELET (THROMBOCYTE) COUNT , *EDTA WHOLE BLOOD*

HEMOGLOBIN	14.0	g/dL	13 - 17	PHOTOMETRIC
WBC	7.9	*10^3/µL	4 - 10	DC detection method
RBC	**4.31**	*10^6/µL	4.5 - 5.5	DC detection method
PLATELET (THROMBOCYTE) COUNT	166	*10^3/µL	150 - 450*10^3/µL	DC detection method/Microscopy
DIFFERENTIAL COUNT				
NEUTROPHILS	63	%	40 - 80 %	Flowcytometry/Microscopy
LYMPHOCYTES	30	%	20 - 40 %	Flowcytometry/Microscopy
MONOCYTES	05	%	2 - 10 %	Flowcytometry/Microscopy
EOSINOPHILS	02	%	1 - 6 %	Flowcytometry/Microscopy
BASOPHILS	00	%	0-0.9%	Flowcytometry/Microscopy
CBC SUBGROUP				
HEMATOCRIT / PCV	42.8	%	40 - 50 %	Calculated
MCV	99.4	fl	83 - 101 fl	Calculated
MCH	**32.6**	pg	27 - 32 pg	Calculated
MCHC	32.8	gm/dl	31.5-34.5 gm/dl	Calculated
RDW - RED CELL DISTRIBUTION WIDTH	**15.6**	%	11.6-14%	Calculated
PDW-PLATELET DISTRIBUTION WIDTH	28.1	fL	8.3 - 25 fL	Calculated
MPV-MEAN PLATELET VOLUME	13.7		7.5 - 11.5 fl	Calculated

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

Lab No. : SR7416567 **Name : ABHISHEK KUMAR SINGH** **Age/G : 35 Y 2 M 27 D / M** **Date : 17-03-2023**

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

ABO	A	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. NEHA GUPTA
MD, DNB (Pathology)
Consultant Pathologist

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Lab No. : SR7416567 **Name : ABHISHEK KUMAR SINGH** **Age/G : 35 Y 2 M 27 D / M** **Date : 17-03-2023**

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

1stHour	13	mm/hr	0.00 - 20.00 mm/hr	Westergren

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	1.010		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	1-2	/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. : SR7416567 **Name : ABHISHEK KUMAR SINGH** **Age/G : 35 Y 2 M 27 D / M** **Date : 17-03-2023**

ALKALINE PHOSPHATASE , *GEL SERUM*				
ALKALINE PHOSPHATASE	66	U/L	46-116 U/L	IFCC standardization
BILIRUBIN (TOTAL) , *GEL SERUM*				
BILIRUBIN (TOTAL)	1.10	mg/dL	0.3-1.2 mg/dL	Vanadate oxidation
CREATININE, BLOOD , *GEL SERUM*	0.89	mg/dL	0.7-1.3 mg/dL	Jaffe, alkaline picrate, kinetic
CALCIUM, BLOOD				
CALCIUM,BLOOD	9.20	mg/dL	8.7-10.4 mg/dL	Arsenazo III
TOTAL PROTEIN [BLOOD] ALB:GLO RATIO , .				
TOTAL PROTEIN	7.70	g/dL	5.7-8.2 g/dL	BIURET METHOD
ALBUMIN	4.8	g/dL	3.2-4.8 g/dL	BCG Dye Binding
GLOBULIN	2.90	g/dl	1.8-3.2 g/dl	Calculated
AG Ratio	1.66		1.0 - 2.5	Calculated
SGOT/AST , *GEL SERUM*				
SGOT/AST	**42**	U/L	13-40 U/L	Modified IFCC
URIC ACID, URINE, SPOT URINE				
URIC ACID, SPOT URINE	**21.00**	mg/dL	37-92 mg/dL	URICASE
BILIRUBIN (DIRECT) , *GEL SERUM*				
BILIRUBIN (DIRECT)	**0.30**	mg/dL	<0.2 mg/dL	Vanadate oxidation
UREA,BLOOD	21.4	mg/dL	19-49 mg/dL	Urease with GLDH
SGPT/ALT , *GEL SERUM*				
SGPT/ALT	**79**	U/L	7-40 U/L	Modified IFCC
PHOSPHORUS-INORGANIC, BLOOD , *GEL SERUM*				
PHOSPHORUS-INORGANIC,BLOOD	2.7	mg/dL	2.4-5.1 mg/dL	Phosphomolybdate/UV
URIC ACID, BLOOD , *GEL SERUM*				
URIC ACID,BLOOD	**8.50**	mg/dL	3.5-7.2 mg/dL	Uricase/Peroxidase
THYROID PANEL (T3, T4, TSH) , *GEL SERUM*				
T3-TOTAL (TRI IODOTHYRONINE)	1.16	ng/ml	0.60-1.81 ng/ml	CLIA
T4-TOTAL (THYROXINE)	10.0	µg/dL	3.2-12.6 µg/dL	CLIA
TSH (THYROID STIMULATING HORMONE)	3.55	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. ANANNYA GHOSH
MBBS, MD (Biochemistry)
Consultant Biochemist

Lab No.	: TLG/17-03-2023/SR7416567	**Lab Add.**	: Tollygunge
Patient Name	: **ABHISHEK KUMAR SINGH**	**Ref Dr.**	: Dr.MEDICAL OFFICER
Age	: 35 Y 2 M 27 D	**Collection Date:**	
Gender	: M	**Report Date**	: 17/Mar/2023 04:06PM

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

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Suraksha DIAGNOSTICS

Lab No.	: TLG/17-03-2023/SR7416567	**Lab Add.**	: Tollygunge
Patient Name	: **ABHISHEK KUMAR SINGH**	**Ref Dr.**	: Dr.MEDICAL OFFICER
Age	: 35 Y 2 M 27 D	**Collection Date:**	
Gender	: M	**Report Date**	: 18/Mar/2023 07:33AM

E.C.G. REPORT

DATA	
HEART RATE	61 Bpm
PR INTERVAL	145 Ms
QRS DURATION	96 Ms
QT INTERVAL	394 Ms
QTC INTERVAL	398 Ms
AXIS	
P WAVE	24 Degree
QRS WAVE	1 Degree
T WAVE	23 Degree
IMPRESSION :	**Sinus Rhythm**
	ECG is otherwise within normal limits

DR S S SAHAI
DM (Cardiology)

Lab No.	: TLG/17-03-2023/SR7416567	**Lab Add.**	: Tollygunge
Patient Name	: **ABHISHEK KUMAR SINGH**	**Ref Dr.**	: Dr.MEDICAL OFFICER
Age	: 35 Y 2 M 27 D	**Collection Date:**	
Gender	: M	**Report Date**	: 18/Mar/2023 09:55AM

DEPARTMENT OF ULTRASONOGRAPHY

REPORT ON EXAMINATION OF WHOLE ABDOMEN

LIVER

Liver is mildly enlarged (16.4 cm) in size. **Parenchymal echogenicity of both lobes are moderately increased**. 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.

PORTAL VEIN

Normal in diameter. Lumen is clear.

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 (10.87 cm), 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 : 10.92 cm.

Left kidney measures : 11.21 cm.

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.	: TLG/17-03-2023/SR7416567	**Lab Add.**	: Tollygunge
Patient Name	: **ABHISHEK KUMAR SINGH**	**Ref Dr.**	: Dr.MEDICAL OFFICER
Age	: 35 Y 2 M 27 D	**Collection Date:**	
Gender	: M	**Report Date**	: 18/Mar/2023 09:55AM

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

It measures : 3.81 x 3.38 x 3.16 cm. Volume : 21 cc.

MISCELLANEOUS

No ascites or pleural effusion is seen.

IMPRESSION:

Mild hepatomegaly with grade II 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.

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MBBS, DNB (Radiology)
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:	C02135979987
Patient ID:	SR7416567
Name:	
Physician:	
Sex:	
DOB:	

Comments:

Analysis Data

Analysis Performed:	17/MAR/2023 13:09:54
Injection Number:	6663U
Run Number:	158
Rack ID:	0002
Tube Number:	10
Report Generated:	17/MAR/2023 13:16:30
Operator ID:	ASIT

Peak Name	NGSP %	Area %	Retention Time (min)	Peak Area
Unknown	---	0.1	0.113	2272
A1a	---	1.0	0.161	16664
A1b	---	0.9	0.225	15407
F	---	0.6	0.276	10618
LA1c	---	1.7	0.408	29207
A1c	5.0	---	0.519	69902
P3	---	3.3	0.796	56459
P4	---	1.1	0.876	19480
Ao	---	87.2	0.997	1498347

Total Area: 1,718,355

HbA1c (NGSP) = 5.0 % HbA1c (IFCC) = 31 mmol/mol