



Lab No. : KNK/12-01-2023/SR7170082
 Patient Name : SOUMEN SARKAR
 Age : 36 Y 7 M 9 D
 Gender : M

Lab Add. : Newtown, Kolkata-700156
 Ref Dr. : Dr.MEDICAL OFFICER
 Collection Date: 12/Jan/2023 08:44AM
 Report Date : 12/Jan/2023 04:33PM



Test Name	Result	Unit	Bio Ref. Interval	Method
PHOSPHORUS-INORGANIC, BLOOD , GEL SERUM				
PHOSPHORUS-INORGANIC,BLOOD	3.4	mg/dL	2.4-5.1 mg/dL	Phosphomolybdate/UV

Dr NEEPA CHOWDHURY
 MBBS MD (Biochemistry)
 Consultant Biochemist



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[PDF Attached](#)

GLYCATED HAEMOGLOBIN (HBA1C) , EDTA WHOLE BLOOD

GLYCATED HEMOGLOBIN (HBA1C)	5.2	%	***FOR BIOLOGICAL REFERENCE INTERVAL DETAILS , PLEASE REFER TO THE BELOW MENTIONED REMARKS/NOTE WITH ADDITIONAL CLINICAL INFORMATION ***	
HbA1c (IFCC)	33.0	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

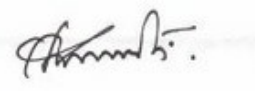
- Ø Patients should use self-monitoring of blood glucose (SMBG) and HbA1c levels to assess glycemc control.
- Ø The timing and frequency of SMBG should be tailored based on patients' individual treatment, needs, and goals.
- Ø Patients should undergo HbA1c testing at least twice a year if they are meeting 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. SUPARBA CHAKRABARTI
 MBBS, MD(BIOCHEMISTRY)
 Consultant Biochemist

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*SGPT/ALT , GEL SERUM					
SGPT/ALT	84.00	U/L	7-40 U/L	IFCC KINETIC METHOD	
*POTASSIUM, BLOOD , GEL SERUM					
POTASSIUM,BLOOD	4.20	mEq/L	3.5 - 5.5 mEq/L	ISE DIRECT	
*CALCIUM, BLOOD					
CALCIUM,BLOOD	8.80	mg/dL	8.7-10.4 mg/dL	Modified OCPC	
*GLUCOSE, PP , BLOOD, NAF PLASMA					
GLUCOSE,PP	147	mg/dL	Impaired Glucose Tolerance-140 mg/dL to 199 mg/dL. Diabetes >= 200 mg/dL.	Hexokinase Method	
*BLOOD GROUP ABO+RH [GEL METHOD] , EDTA WHOLE BLOOD					
ABO	B			Gel Card	
RH	POSITIVE			Gel Card	
TECHNOLOGY USED: GEL METHOD					
ADVANTAGES :					
<ul style="list-style-type: none"> • 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.					
*BILIRUBIN (TOTAL) , GEL SERUM					
BILIRUBIN (TOTAL)	0.88	mg/dL	0.3-1.2 mg/dL	DIAZOTIZED DCA	
GLUCOSE, FASTING , BLOOD, NAF PLASMA					
GLUCOSE,FASTING	105	mg/dL	Impaired Fasting-100-125 mg/dL. Diabetes- >= 126 mg/dL. Fasting is defined as no caloric intake for at least 8 hours.	Hexokinase Method	
*ALKALINE PHOSPHATASE , GEL SERUM					
ALKALINE PHOSPHATASE	90.00	U/L	46-116 U/L	PNPP- AMP	
*SGOT/AST , GEL SERUM					
SGOT/AST	37.00	U/L	13-40 U/L	IFCC Kinetic Method	
*SODIUM, BLOOD , GEL SERUM					
SODIUM,BLOOD	139.00	mEq/L	136 - 145 mEq/L	ISE DIRECT	
*CHLORIDE, BLOOD , .					
CHLORIDE,BLOOD	100.00	mEq/L	98 - 107 mEq/L	ISE DIRECT	
CREATININE, BLOOD , GEL SERUM					
	0.86	mg/dL	0.7-1.3 mg/dL	Jaffe, alkaline picrate, kinetic	
*ESR (ERYTHROCYTE SEDIMENTATION RATE) , EDTA WHOLE BLOOD					
1stHour	05	mm/hr	0.00 - 20.00 mm/hr	Westergren	
*TOTAL PROTEIN [BLOOD] ALB:GLO RATIO , .					

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TOTAL PROTEIN	7.70	g/dL	5.7-8.2 g/dL BIURET METHOD
ALBUMIN	4.4	g/dL	3.2-4.8 g/dL BCG Dye Binding
GLOBULIN	3.30	g/dl	1.8-3.2 g/dl Calculated
AG Ratio	1.33		1.0 - 2.5 Calculated

***URINE ROUTINE ALL, ALL , URINE**

PHYSICAL EXAMINATION

COLOUR	PALE YELLOW
APPEARANCE	SLIGHTLY HAZY

CHEMICAL EXAMINATION

pH	6		4.8 - 7.4	DIPSTICK
SPECIFIC GRAVITY	1.015		1.016-1.022	DIPSTICK
PROTEIN	NOT DETECTED		NOT DETECTED	DIPSTICK(Protein Error Principle)/MANUAL
GLUCOSE	NOT DETECTED		NOT DETECTED	DIPSTICK (Glucose Oxidase - peroxidase)/ MANUAL
KETONES (ACETOACETIC ACID, ACETONE)	NOT DETECTED		NOT DETECTED	Dipstick (Legals test)/Manual
BLOOD	NEGATIVE		NOT DETECTED	DIPSTICK(Pseudo Peroxidase Method)
BILIRUBIN	ABSENT		NEGATIVE	DIPSTICK(Azo-Diazo Reaction)/MANUAL
UROBILINOGEN	NORMAL		NORMAL	DIPSTICK(Diazonium Ion Reaction)/MANUAL
NITRITE	NEGATIVE		NEGATIVE	DIPSTICK(GRIESS TEST)
LEUCOCYTE ESTERASE	PRESENT(++)		NEGATIVE	DIPSTICK

MICROSCOPIC EXAMINATION

LEUKOCYTES (PUS CELLS)	20 - 25	/hpf	0-5	Microscopy
EPITHELIAL CELLS	4 - 5	/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
OTHERS	NIL			

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.

***URIC ACID, URINE, SPOT URINE**

URIC ACID, SPOT URINE	19.70	mg/dL	37-92 mg/dL	URICASE
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***BILIRUBIN (DIRECT) , GEL SERUM**

BILIRUBIN (DIRECT)	0.16	mg/dL	<0.2 mg/dL	DIAZOTIZED DCA
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***CBC WITH PLATELET (THROMBOCYTE) COUNT , EDTA WHOLE BLOOD**

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Lab No. : SR7170082	Name : SOUMEN SARKAR	Age/G : 36 Y 7 M 9 D / M	Date : 12-01-2023	
HEMOGLOBIN	14.6	g/dL	13 - 17	PHOTOMETRIC
WBC	6.9	*10 ³ /μL	4 - 10	DC detection method
RBC	4.82	*10 ⁶ /μL	4.5 - 5.5	DC detection method
PLATELET (THROMBOCYTE) COUNT	150	*10 ³ /μL	150 - 450*10 ³ /μL	DC detection method/Microscopy
<u>DIFFERENTIAL COUNT</u>				
NEUTROPHILS	66	%	40 - 80 %	Flowcytometry/Microscopy
LYMPHOCYTES	25	%	20 - 40 %	Flowcytometry/Microscopy
MONOCYTES	06	%	2 - 10 %	Flowcytometry/Microscopy
EOSINOPHILS	03	%	1 - 6 %	Flowcytometry/Microscopy
BASOPHILS	00	%	0-0.9%	Flowcytometry/Microscopy
<u>CBC SUBGROUP</u>				
HEMATOCRIT / PCV	43.7	%	40 - 50 %	Calculated
MCV	90.7	fl	83 - 101 fl	Calculated
MCH	30.3	pg	27 - 32 pg	Calculated
MCHC	33.4	gm/dl	31.5-34.5 gm/dl	Calculated
RDW - RED CELL DISTRIBUTION WIDTH	15.2	%	11.6-14%	Calculated
PDW-PLATELET DISTRIBUTION WIDTH	24.8	fL	8.3 - 25 fL	Calculated
MPV-MEAN PLATELET VOLUME	11.6		7.5 - 11.5 fl	Calculated
*LIPID PROFILE , GEL SERUM				
CHOLESTEROL-TOTAL	184.00	mg/dL	Desirable: < 200 mg/dL Borderline high: 200-239 mg/dL High: > or =240 mg/dL	CHOD – PAP
TRIGLYCERIDES	214.00	mg/dL	Normal: < 150, BorderlineHigh: 150-199, High: 200-499, VeryHigh: >500	ENZYMATIC (END POINT)
HDL CHOLESTEROL	41.00	mg/dl	< 40 - Low 40-59- Optimum 60 - High	ENZYMATIC (PEG)
LDL CHOLESTEROL DIRECT	119.0	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	HOMOGENOUS ENZYMATICAL
VLDL	24	mg/dl	< 40 mg/dl	Calculated
CHOL HDL Ratio	4.5		LOW RISK 3.3-4.4 AVERAGE RISK 4.47-7.1 MODERATE RISK 7.1-11.0 HIGH RISK >11.0	Calculated
UREA,BLOOD	16.0	mg/dL	19 - 49 mg/dL	Urease with GLDH
*THYROID PANEL (T3, T4, TSH) , GEL SERUM				
T3-TOTAL (TRI IODOTHYRONINE)	0.99	ng/ml	0.60-1.81 ng/ml	CLIA
T4-TOTAL (THYROXINE)	7.2	μg/dL	3.2-12.6 μg/dL	CLIA
TSH (THYROID STIMULATING HORMONE)	3.91	μIU/mL	0.35-5.5 μIU/mL	CLIA

BIOLOGICAL REFERENCE INTERVAL : [ONLY FOR PREGNANT MOTHERS]

Trimester specific TSH LEVELS during pregnancy:

FIRST TRIMESTER	: 0.10 2.50 μ IU/mL
SECOND TRIMESTER	: 0.20 3.00 μ IU/mL
THIRD TRIMESTER	: 0.30 3.00 μ IU/mL

References :

1. Indian Thyroid Society guidelines for management of thyroid dysfunction during pregnancy. Clinical Practice Guidelines, New Delhi: Elsevier; 2012.

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2. Stagnaro-Green A, Abalovich M, Alexander E, Azizi F, Mestman J, Negro R, et al. Guidelines of the American Thyroid Association for the Diagnosis and Management of Thyroid Disease During Pregnancy and Postpartum. *Thyroid* 2011;21:1081-25.

3. Dave A, Maru L, Tripathi M. Importance of Universal screening for thyroid disorders in first trimester of pregnancy. *Indian J Endocr Metab [serial online]* 2014 [cited 2014 Sep 25];18:735-8. Available from: <http://www.ijem.in/text.asp?2014/18/5/735/139221>.

***URIC ACID, BLOOD , GEL SERUM**

URIC ACID,BLOOD	7.50	mg/dL	3.7-9.2 mg/dL	Uricase/Peroxidase
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DR. SHABNAM PARVIN
MD (Pathology)
Consultant Pathologist



Lab No. : SR7170082 Name : SOUMEN SARKAR Age/G : 36 Y 7 M 9 D / M Date : 12-01-2023

CBC WITH PLATELET & RETICULOCYTE COUNT , EDTA WHOLE BLOOD

HEMOGLOBIN	14.2	g/dL	13 - 17	PHOTOMETRIC
WBC	7.0	*10 ³ /μL	4 - 10	DC detection method
RBC	4.80	*10 ⁶ /μL	4.5 - 5.5	DC detection method
PLATELET (THROMBOCYTE) COUNT	160	*10 ³ /μL	150 - 450*10 ³ /μL	DC detection method/Microscopy

DIFFERENTIAL COUNT

NEUTROPHILS	65	%	40 - 80 %	Flowcytometry/Microscopy
LYMPHOCYTES	27	%	20 - 40 %	Flowcytometry/Microscopy
MONOCYTES	06	%	2 - 10 %	Flowcytometry/Microscopy
EOSINOPHILS	02	%	1-6%	Flowcytometry/Microscopy
BASOPHILS	00	%	0-0.9%	Flowcytometry/Microscopy

CBC SUBGROUP 1

HEMATOCRIT / PCV	43.6	%	40 - 50 %	Calculated
MCV	90.7	fl	83 - 101 fl	Calculated
MCH	29.6	pg	27 - 32 pg	Calculated
MCHC	32.7	gm/dl	31.5-34.5 gm/dl	Calculated
RDW - RED CELL DISTRIBUTION WIDTH	15.9	%	11.6-14%	Calculated
RETICULOCYTE COUNT- AUTOMATED,BLOOD	6.0	%	0.5-2.5%	Cell Counter/Microscopy

□

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

Lab No. : KNK/12-01-2023/SR7170082
Patient Name : SOUMEN SARKAR
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Gender : M

Lab Add. :
Ref Dr. : Dr.MEDICAL OFFICER
Collection Date:
Report Date : 12/Jan/2023 02:50PM



DEPARTMENT OF CARDIOLOGY
REPORT OF E.C.G.

DATA		
HEART RATE	70	Bpm
PR INTERVAL	128	Ms
QRS DURATION	80	Ms
QT INTERVAL	344	Ms
QTC INTERVAL	374	Ms
AXIS		
P WAVE	43	Degree
QRS WAVE	22	Degree
T WAVE	45	Degree
IMPRESSION	: Normal sinus rhythm, within normal limits.	

ACR

Dr. A C RAY
Department of Non-invasive
Cardiology

Lab No. : KNK/12-01-2023/SR7170082
Patient Name : SOUMEN SARKAR
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Gender : M

Lab Add. :
Ref Dr. : Dr.MEDICAL OFFICER
Collection Date:
Report Date : 12/Jan/2023 12:47PM



X-RAY REPORT OF CHEST (PA) VIEW

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 increased --- Suggested echocardiography.

Bony thorax reveals no definite abnormality.

□

DR. VIMLESH JI VIMAL
MBBS (Cal)
MD, DMRD(IPGME & R)
Consultant Radiologist
Reg No 61436

Lab No. : KNK/12-01-2023/SR7170082
Patient Name : SOUMEN SARKAR
Age : 36 Y 7 M 9 D
Gender : M

Lab Add. :
Ref Dr. : Dr.MEDICAL OFFICER
Collection Date:
Report Date : 12/Jan/2023 01:53PM



ULTRASONOGRAPHY OF WHOLE ABDOMEN

LIVER: Enlarged in size and parenchyma shows grade "II" fatty changes. No focal lesion of altered echogenicity is seen. Intrahepatic biliary radicles are not dilated. The portal vein branches and hepatic veins are normal.

GALL BLADDER: Well distended; wall thickness is normal. Gall Bladder lumen shows no intraluminal calculus or mass. No pericholecystic collection or mass formation is noted.

PORTA HEPATIS: The portal vein (1.04 cm) is normal in caliber with clear lumen. The common bile duct is normal in caliber. Visualized lumen is clear. Common bile duct measures approx 0.49 cm in diameter.

PANCREAS: It is normal in shape, size and echopattern. Main pancreatic duct is not dilated. No focal lesion of altered echogenicity is seen. The peripancreatic region shows no abnormal fluid collection.

SPLEEN: It is normal in shape, size (11.85 cm) and shows homogeneous echopattern. No focal lesion is seen. No abnormal venous dilatation is seen in the splenic hilum.

KIDNEYS: Both Kidneys are normal in shape, size and position. Cortical echogenicity and thickness are normal with normal cortico-medullary differentiation in both kidneys. No calculus, hydronephrosis or mass is noted. The perinephric region shows no abnormal fluid collection.

Right Kidney measure: 10.07 cm, Left Kidney measure: 10.35 cm.

URETER: Both ureters are not dilated. No calculus is noted in either side.

URINARY BLADDER: It is adequately distended providing optimum scanning window. The lumen is clear and wall thickness is normal. Post void residual urine volume is insignificant.

PROSTATE: It is grade "II" enlarged in size and normal echopattern. No focal lesion is seen. Capsule is smooth.

Prostate volume: 42.54 cc.

IMPRESSION:

- **Hepatomegaly with grade "II" fatty changes.**
- **Grade "II" prostatomegaly.**

Kindly note

Ø Ultrasound is not the modality of choice to rule out subtle bowel lesion.

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.

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Age : 36 Y 7 M 9 D
Gender : M

Lab Add. :
Ref Dr. : Dr.MEDICAL OFFICER
Collection Date:
Report Date : 12/Jan/2023 01:53PM



Nishan Ghosh

Dr. NISHAN GHOSH
MBBS, CBET Reg. NO : 67862

Patient Data

Sample ID: C02135052440
 Patient ID: SR7170082
 Name:
 Physician:
 Sex:
 DOB:

Analysis Data

Analysis Performed: 12/JAN/2023 17:00:25
 Injection Number: 5442U
 Run Number: 142
 Rack ID: 0007
 Tube Number: 5
 Report Generated: 12/JAN/2023 17:21:28
 Operator ID: ANAMIKA

Comments:

Peak Name	NGSP %	Area %	Retention Time (min)	Peak Area
Unknown	---	0.2	0.112	2596
A1a	---	0.8	0.161	12301
A1b	---	1.0	0.223	14180
F	---	0.7	0.273	9874
LA1c	---	1.6	0.403	23770
A1c	5.2	---	0.513	60529
P3	---	3.2	0.788	46144
P4	---	1.1	0.870	16547
Ao	---	87.3	0.996	1277515

Total Area: 1,463,457

HbA1c (NGSP) = 5.2 % HbA1c (IFCC) = 33 mmol/mol

