Certificate No. M-0937

Suraksha DIAGNOSTICS

Lab No.	: BOR/07-03-2023/SR7377831	**Lab Add.**	: Kamini Center, Boring Pataliputra Road - 800013
Patient Name	: **KUMAR ASHWINI**	**Ref Dr.**	: Dr.MEDICAL OFFICER
Age	: 34 Y 0 M 0 D	**Collection Date**	: 07/Mar/2023 09:08AM
Gender	: M	**Report Date**	: 07/Mar/2023 01:52PM

Test Name	Result	Unit	Bio Ref. Interval	Method
URIC ACID, BLOOD , *GEL SERUM*				
URIC ACID,BLOOD	4.50	mg/dL	3.7-9.2 mg/dL	URICASE METHOD
BILIRUBIN (TOTAL) , *GEL SERUM*				
BILIRUBIN (TOTAL)	1.02	mg/dL	0.3-1.2 mg/dL	JENDRASSIK GROF METHOD
GLUCOSE, PP , *BLOOD, NAF PLASMA*				
GLUCOSE,PP	112	mg/dL	Impaired Glucose Tolerance-140 mg/dL to 199 mg/dL. Diabetes>= 200 mg/dL.	HEXOKINASE METHOD
CALCIUM, BLOOD				
CALCIUM,BLOOD	**8.40**	mg/dL	8.7-10.4 mg/dL	OCPC METHOD
ALKALINE PHOSPHATASE , *GEL SERUM*				
ALKALINE PHOSPHATASE	55.00	U/L	46-116 U/L	PNPP ,AMP BUFFER
SODIUM, BLOOD , *GEL SERUM*				
SODIUM,BLOOD	141.00	mEq/L	136 - 145 mEq/L	ISE INDIRECT
URIC ACID, URINE, SPOT URINE				
URIC ACID, SPOT URINE	**10.10**	mg/dL	37-92 mg/dL	URICASE
GLUCOSE, FASTING , *BLOOD, NAF PLASMA*				
GLUCOSE,FASTING	**103**	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
BLOOD GROUP ABO+RH [GEL METHOD] , *EDTA WHOLE BLOOD*				
ABO	AB			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.

SGPT/ALT , *GEL SERUM*				
SGPT/ALT	16.00	U/L	7-40 U/L	UV P5P
CREATININE, BLOOD , *GEL SERUM*	**0.52**	mg/dL	0.7-1.3 mg/dL	ALKALINE PICRATE KINETIC
LIPID PROFILE , *GEL SERUM*				

Lab No. : SR7377831 **Name : KUMAR ASHWINI** **Age/G : 34 Y 0 M 0 D / M** **Date : 07-03-2023**

CHOLESTEROL-TOTAL	175.00	mg/dL	Desirable: < 200 mg/dL Borderline high: 200-239 mg/dL High: > or =240 mg/dL	CHOLESTEROL OXIDASE ESTERASE PEROXIDASE METHOD
TRIGLYCERIDES	73.00	mg/dL	Normal:: < 150, BorderlineHigh::150-199, High:: 200-499, VeryHigh::>500	ENZYMATIC METHOD
HDL CHOLESTEROL	50.00	mg/dl	< 40 - Low 40-59- Optimum 60 - High	DIRECT MEASURE PEG
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	DIRECT MEASURE
VLDL	12	mg/dl	< 40 mg/dl	Calculated
CHOL HDL Ratio	3.5		LOW RISK 3.3-4.4 AVERAGE RISK 4.47-7.1 MODERATE RISK 7.1-11.0 HIGH RISK >11.0	Calculated

TOTAL PROTEIN [BLOOD] ALB:GLO RATIO , .

TOTAL PROTEIN	7.70	g/dL	5.7-8.2 g/dL	BIURET,SERUM BLANK, END POINT
ALBUMIN	4.2	g/dL	3.2-4.8 g/dL	BROMO-CRESOL PURPLE
GLOBULIN	**3.53**	g/dl	1.8-3.2 g/dl	Calculated
AG Ratio	1.18		1.0 - 2.5	Calculated

BILIRUBIN (DIRECT) , *GEL SERUM*

BILIRUBIN (DIRECT)	**0.23**	mg/dL	<0.2 mg/dL	DIAZOTIZATION METHOD

POTASSIUM, BLOOD , *GEL SERUM*

POTASSIUM,BLOOD	4.20	mEq/L	3.5 - 5.1 mEq/L	ISE INDIRECT

CHLORIDE, BLOOD , .

CHLORIDE,BLOOD	100.00	mEq/L	98 - 107 mEq/L	ISE INDIRECT

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

HEMOGLOBIN	13.3	g/dL	13 - 17	PHOTOMETRIC
WBC	8.2	*10^3/µL	4 - 10	DC detection method
RBC	4.91	*10^6/µL	4.5 - 5.5	DC detection method
PLATELET (THROMBOCYTE) COUNT	155	*10^3/µL	150 - 450*10^3/µL	DC detection method/Microscopy
DIFFERENTIAL COUNT				
NEUTROPHILS	73	%	40 - 80 %	Flowcytometry/Microscopy
LYMPHOCYTES	22	%	20 - 40 %	Flowcytometry/Microscopy
MONOCYTES	02	%	2 - 10 %	Flowcytometry/Microscopy
EOSINOPHILS	03	%	1 - 6 %	Flowcytometry/Microscopy
BASOPHILS	00	%	0-0.9%	Flowcytometry/Microscopy
CBC SUBGROUP				
HEMATOCRIT / PCV	41.9	%	40 - 50 %	Calculated
MCV	85.3	fl	83 - 101 fl	Calculated
MCH	27.1	pg	27 - 32 pg	Calculated
MCHC	31.8	gm/dl	31.5-34.5 gm/dl	Calculated
RDW - RED CELL DISTRIBUTION WIDTH	**16.4**	%	11.6-14%	Calculated
PDW-PLATELET DISTRIBUTION WIDTH	26.8	fL	8.3 - 25 fL	Calculated
MPV-MEAN PLATELET VOLUME	12.3		7.5 - 11.5 fl	Calculated
RBC	NORMOCYTIC NORMOCHROMIC.			
WBC.	NORMAL IN NUMBER &			

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	MORPHOLOGY			
PLATELET	ADEQUATE.			

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

1stHour	20	mm/hr	0.00 - 20.00 mm/hr	Westergren

SGOT/AST , *GEL SERUM*

SGOT/AST	30.00	U/L	13-40 U/L	UV P5P

UREA,BLOOD	19.0	mg/dL	19 - 49 mg/dL	UREASE

PHOSPHORUS-INORGANIC, BLOOD , *GEL SERUM*

PHOSPHORUS-INORGANIC,BLOOD	4.1	mg/dL	2.4-5.1 mg/dL	PHOSPHOMOLYBDATE

URINE ROUTINE ALL, ALL , *URINE*

PHYSICAL EXAMINATION

COLOUR	PALE YELLOW			
APPEARANCE	SLIGHTLY HAZY			

CHEMICAL EXAMINATION

pH	6		4.6 - 8.0	Dipstick (triple indicator method)
SPECIFIC GRAVITY	1.005		1.005 - 1.030	Dipstick (ion concentration method)
PROTEIN	NEGATIVE		NOT DETECTED	Dipstick (protein error of pH indicators)/Manual
GLUCOSE	NEGATIVE		NOT DETECTED	Dipstick(glucose-oxidase-peroxidase method)/Manual
KETONES (ACETOACETIC ACID, ACETONE)	NEGATIVE		NOT DETECTED	Dipstick (Legals test)/Manual
BLOOD	NEGATIVE		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)	02-03	/hpf	0-5	Microscopy
EPITHELIAL CELLS	01-02	/hpf	0-5	Microscopy
RED BLOOD CELLS	NEGATIVE	/hpf	0-2	Microscopy
CAST	NEGATIVE		NOT DETECTED	Microscopy
CRYSTALS	NEGATIVE		NOT DETECTED	Microscopy
BACTERIA	NEGATIVE		NOT DETECTED	Microscopy
YEAST	NEGATIVE		NOT DETECTED	Microscopy
OTHERS	NEGATIVE			

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.

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E-mail: info@surakshanet.com | Website: www.surakshanet.com

Lab No. : SR7377831	Name : KUMAR ASHWINI	Age/G : 34 Y 0 M 0 D / M	Date : 07-03-2023

PDF Attached

GLYCATED HAEMOGLOBIN (HBA1C) , *EDTA WHOLE BLOOD*

GLYCATED HEMOGLOBIN (HBA1C)	5.1	%	***FOR BIOLOGICAL REFERENCE INTERVAL DETAILS , PLEASE REFER TO THE BELOW MENTIONED REMARKS/NOTE WITH ADDITIONAL CLINICAL INFORMATION ***	
HbA1c (IFCC)	32.0	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, Bio-Rad D 10
Method : HPLC Cation Exchange
HbA1C : DUAL REPORTING OF UNITS [Ref 2,3,4]
Suraksha Diagnostic Pvt. Ltd. has commenced reporting HbA1c in dual units. This is in keeping with current International recommendations to allow a transition phase from current reporting units (%) to the eventual (IFCC) units (mmol/mol). It is anticipated that only IFCC units will be used after 2 years of dual reporting. Please note that the method of analysis has not changed. Although the two results look numerically different, they are clinically equivalent. In defining HbA1C, the unit mmol /mol was determined to be the most accurate description of what is being measured. This will make the measurement more precise and allow for better comparisons of HbA1c results from different laboratories and hospitals throughout the world.

Standardization & traceability [Ref 2,3,4]
HbA1c is standardized & traceable to IFCC methods HPLC-CE & HPLC-MS. This new unit (mmol/mol) is used as part of this standardization. This change in HbA1c calibration is to conform to national & international best practice. The initiative will mean that HbA1c is measured specifically & reproducibly. It also enables the use of international reference ranges & harmonization of medical decision or target values.

Recommendations for glycemic targets [Ref 1]
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 more or less 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.
3. Geistanger A, Arends S, Berding C, Hoshino T, Jeppsson J-O, Little R, Siebelder C and Weykamp C, on behalf of the IFCC Working Group on Standardization of HbA1c: Statistical Methods for Monitoring the Relationship between the IFCC Reference Measurement Procedure for Hemoglobin A1c ..Clin Chem 2008; 54(8): 1379-8.
4. International Expert Committee Report, drawn from the International Diabetes Federation (IDF), the European Association for the Study of Diabetes (EASD),American Diabetes Association (ADA), International Federation of Clinical Chemistry and Laboratory Medicine, International Society for Pediatric & Adolescent Diabetes. International Congress - IFCC, WorldLab, EuroMedLab- Berlin,2011.

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

T3-TOTAL (TRI IODOTHYRONINE)	0.78	ng/ml	0.60-1.81 ng/ml	CLIA
T4-TOTAL (THYROXINE)	6.4	µg/dL	3.2-12.6 µg/dL	CLIA
TSH (THYROID STIMULATING HORMONE)	3.26	µIU/mL	0.55-4.78 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.*

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.

Dr S. C. Jha
MBBS MD (PATH)
SENIOR CONSULTANT
PATHOLOGIST & HEMATOLOGIST

Suraksha DIAGNOSTICS

Lab No.	: BOR/07-03-2023/SR7377831	**Lab Add.**	: Off Patliputra, Patna
Patient Name	: **KUMAR ASHWINI**	**Ref Dr.**	: Dr.MEDICAL OFFICER
Age	: 34 Y 0 M 0 D	**Collection Date**	:
Gender	: M	**Report Date**	: 07/Mar/2023 06:16PM

E.C.G. REPORT

DATA		
HEART RATE	106	Bpm
PR INTERVAL	156	Ms
QRS DURATION	88	Ms
QT INTERVAL	316	Ms
QTC INTERVAL	421	Ms
AXIS		
P WAVE	31	Degree
QRS WAVE	37	Degree
T WAVE	25	Degree
IMPRESSION	:	**SINUS TACHYCARDIA.**

Dr Aditya Kumar
MD (Medicine), DM (Cardiology)

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Patient Name	: **KUMAR ASHWINI**	**Ref Dr.**	: Dr.MEDICAL OFFICER
Age	: 34 Y 0 M 0 D	**Collection Date**	:
Gender	: M	**Report Date**	: 07/Mar/2023 10:20AM

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. Mozammil Rabbani
MBBS., MD(Radiodiagnosis)
Consultant Radiologist
Registration No: 46973

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Age	: 34 Y 0 M 0 D	**Collection Date**	:
Gender	: M	**Report Date**	: 07/Mar/2023 11:26AM

ULTRASONOGRAPHY OF WHOLE ABDOMEN

LIVER: Normal in shape, size (13.8 cm) and parenchymal echopattern. 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 containing a calculus of size 6.0 mm. Wall thickness is normal. No pericholecystic collection or mass formation is noted.

PORTA HEPATIS: The portal vein is normal in caliber with clear lumen. The common bile duct is normal in caliber. Visualized lumen is clear.

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 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 measures 9.8 x 3.9 cm & **LEFT KIDNEY** measures 10.8 x 5.8 cm.

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

PERITONEUM & RETROPERITONEUM: The aorta and IVC are normal. Lymph nodes are not enlarged. No free fluid is seen in peritoneum.

URINARY BLADDER: It is adequately distended providing optimum scanning window. The lumen is clear and wall thickness is normal. **Pre void urine volume is 380 cc and post void urine volume is 56 cc (significant).**

PROSTATE: It is normal in shape, size and echopattern. No focal lesion is seen. Capsule is smooth.

IMPRESSION:

- **Cholelithiasis. Normal CBD and pancreas.**
- **Normal size prostate but significant post void residue.**

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*

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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.

M Rabbani

DR. Mozammil Rabbani
MBBS., MD(Radiodiagnosis)
Consultant Radiologist
Registration No: 46973

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