Certificate No. M-0937

Suraksha DIAGNOSTICS

Lab No.	: BOR/27-01-2023/SR7222630	**Lab Add.**	: Kamini Center, Boring Pataliputra Road - 800013
Patient Name	: **REENA SINGH**	**Ref Dr.**	: Dr.MEDICAL OFFICER
Age	: 34 Y 2 M 21 D	**Collection Date:**	27/Jan/2023 08:58AM
Gender	: F	**Report Date**	: 27/Jan/2023 02:58PM

Test Name	Result	Unit	Bio Ref. Interval	Method
CBC WITH PLATELET (THROMBOCYTE) COUNT , *EDTA WHOLE BLOOD*				
HEMOGLOBIN	**11.4**	g/dL	12 - 15	PHOTOMETRIC
WBC	8.2	*10^3/µL	4 - 10	DC detection method
RBC	**3.74**	*10^6/µL	3.8 - 4.8	DC detection method
PLATELET (THROMBOCYTE) COUNT	250	*10^3/µL	150 - 450*10^3/µL	DC detection method/Microscopy
DIFFERENTIAL COUNT				
NEUTROPHILS	63	%	40 - 80 %	Flowcytometry/Microscopy
LYMPHOCYTES	31	%	20 - 40 %	Flowcytometry/Microscopy
MONOCYTES	02	%	2 - 10 %	Flowcytometry/Microscopy
EOSINOPHILS	04	%	1 - 6 %	Flowcytometry/Microscopy
BASOPHILS	00	%	0-0.9%	Flowcytometry/Microscopy
CBC SUBGROUP				
HEMATOCRIT / PCV	**35.7**	%	36 - 46 %	Calculated
MCV	95.4	fl	83 - 101 fl	Calculated
MCH	30.4	pg	27 - 32 pg	Calculated
MCHC	31.8	gm/dl	31.5-34.5 gm/dl	Calculated
RDW - RED CELL DISTRIBUTION WIDTH	**16.1**	%	11.6-14%	Calculated
PDW-PLATELET DISTRIBUTION WIDTH	20.0	fL	8.3 - 25 fL	Calculated
MPV-MEAN PLATELET VOLUME	10.5		7.5 - 11.5 fl	Calculated
RBC	RBC COUNT LOW, NORMOCYTIC NORMOCHROMIC.			
WBC.	NORMAL IN NUMBER & MORPHOLOGY			
PLATELET	ADEQUATE.			
URINE ROUTINE ALL, ALL , *URINE*				
PHYSICAL EXAMINATION				
COLOUR	PALE YELLOW			
APPEARANCE	Clear			
CHEMICAL EXAMINATION				
pH	5		4.6 - 8.0	Dipstick (triple indicator method)
SPECIFIC GRAVITY	1.015		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				

Lab No. : SR7222630 **Name : REENA SINGH** **Age/G : 34 Y 2 M 21 D / F** **Date : 27-01-2023**

LEUKOCYTES (PUS CELLS)	01-02	/hpf	0-5	Microscopy
EPITHELIAL CELLS	02-03	/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.

GLUCOSE, PP , *BLOOD, NAF PLASMA*

GLUCOSE,PP	115	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	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.

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

1stHour	**66**	mm/hr	0.00 - 20.00 mm/hr	Westergren

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

Lab No. : SR7222630	Name : REENA SINGH		Age/G : 34 Y 2 M 21 D / F	Date : 27-01-2023
UREA,BLOOD , *GEL SERUM*	19.0	mg/dL	19 - 49 mg/dL	UREASE
CALCIUM, BLOOD				
CALCIUM,BLOOD	8.80	mg/dL	8.7-10.4 mg/dL	OCPC METHOD
URIC ACID, BLOOD , *GEL SERUM*				
URIC ACID,BLOOD	**8.70**	mg/dL	3.1-7.8 mg/dL	URICASE METHOD
GLUCOSE, FASTING , *BLOOD, NAF PLASMA*				
GLUCOSE,FASTING	**106**	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

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)	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, 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.

Clinical Information and Laboratory clinical interpretation on Biological Reference Interval:
Low risk / Normal / non-diabetic : <5.7% (NGSP) / < 39 mmol/mol (IFCC)
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Method : HPLC Cation Exchange

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LIPID PROFILE , *GEL SERUM*

CHOLESTEROL-TOTAL	220.00	mg/dL	Desirable: < 200 mg/dL Borderline high: 200-239 mg/dL High: > or =240 mg/dL	CHOLESTEROL OXIDASE ESTERASE PEROXIDASE METHOD
TRIGLYCERIDES	**186.00**	mg/dL	Normal:: < 150, BorderlineHigh::150-199, High:: 200-499, VeryHigh::>500	ENZYMATIC METHOD
HDL CHOLESTEROL	48.00	mg/dl	< 40 - Low 40-59- Optimum 60 - High	DIRECT MEASURE PEG
LDL CHOLESTEROL DIRECT	**141.0**	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	31	mg/dl	< 40 mg/dl	Calculated
CHOL HDL Ratio	**4.6**		LOW RISK 3.3-4.4 AVERAGE RISK 4.47-7.1 MODERATE RISK 7.1-11.0 HIGH RISK >11.0	Calculated

CREATININE, BLOOD	0.76	mg/dL	0.5-1.1 mg/dL	ALKALINE PICRATE KINETIC

PHOSPHORUS-INORGANIC, BLOOD , *GEL SERUM*

PHOSPHORUS-INORGANIC,BLOOD	4.7	mg/dL	2.4-5.1 mg/dL	PHOSPHOMOLYBDATE

TOTAL PROTEIN [BLOOD] ALB:GLO RATIO , .

TOTAL PROTEIN	7.60	g/dL	5.7-8.2 g/dL	BIURET,SERUM BLANK, END POINT
ALBUMIN	4.0	g/dL	3.2-4.8 g/dL	BROMO-CRESOL PURPLE
GLOBULIN	**3.59**	g/dl	1.8-3.2 g/dl	Calculated

Lab No. : SR7222630	Name : REENA SINGH		Age/G : 34 Y 2 M 21 D / F	Date : 27-01-2023
AG Ratio	1.12		1.0 - 2.5	Calculated

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

T3-TOTAL (TRI IODOTHYRONINE)	1.27	ng/ml	0.60-1.81 ng/ml	CLIA
T4-TOTAL (THYROXINE)	11.4	µg/dL	3.2-12.6 µg/dL	CLIA
TSH (THYROID STIMULATING HORMONE)	**6.45**	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 NAYANA DEB
MD (BIOCHEMISTRY)

Lab No. : SR7222630	Name : REENA SINGH	Age/G : 34 Y 2 M 21 D / F	Date : 28-01-2023

POTASSIUM, BLOOD , *GEL SERUM*					
POTASSIUM,BLOOD	4.00	mEq/L	3.5-5.5 mEq/L	ISE INDIRECT	
SODIUM, BLOOD , *GEL SERUM*					
SODIUM,BLOOD	141.00	mEq/L	132 - 146 mEq/L	ISE INDIRECT	
CHLORIDE, BLOOD , .					
CHLORIDE,BLOOD	108.00	mEq/L	99-109 mEq/L	ISE INDIRECT	

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

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Suraksha DIAGNOSTICS

Lab No.	: BOR/27-01-2023/SR7222630	**Lab Add.**	: Off Patliputra, Patna
Patient Name	: **REENA SINGH**	**Ref Dr.**	: Dr.MEDICAL OFFICER
Age	: 34 Y 2 M 21 D	**Collection Date:**	
Gender	: F	**Report Date**	: 27/Jan/2023 07:38PM

E.C.G. REPORT

DATA		
HEART RATE	67	Bpm
PR INTERVAL	138	Ms
QRS DURATION	72	Ms
QT INTERVAL	400	Ms
QTC INTERVAL	426	Ms
AXIS		
P WAVE	35	Degree
QRS WAVE	49	Degree
T WAVE	23	Degree
IMPRESSION	:	**Normal sinus rhythm.**

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

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Patient Name	: **REENA SINGH**	**Ref Dr.**	: Dr.MEDICAL OFFICER
Age	: 34 Y 2 M 21 D	**Collection Date:**	
Gender	: F	**Report Date**	: 27/Jan/2023 11:23AM

ULTRASONOGRAPHY OF WHOLE ABDOMEN

LIVER: Normal in shape, size (15.0 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 lumen shows no intra-luminal calculus or mass. 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 (10.5 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 measures 11.2 x 4.0 cm & **LEFT KIDNEY** measures 11.2 x 4.5 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. Post voiding study shows insignificant residual urine volume.

UTERUS: It is normal in shape, size (7.7 x 3.4 cm) and echopattern. No focal myometrial lesion is seen. Endometrial echo is in midline. Endometrial cavity is empty. Cervix is normal.

ADNEXA: No adnexal SOL is noted.

RIGHT OVARY is normal in shape, size and echopattern.

LEFT OVARY is normal in shape, size and echopattern.

POD : No fluid is seen.

IMPRESSION :-

- **Study within normal limits.**

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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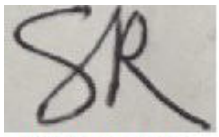
normal and abnormal tissues and are not always conclusive. Further biochemical and radiological investigation & clinical correlation is required to enable the clinician to reach the final diagnosis.

The report and films are not valid for medico-legal purpose.
Patient Identity not verified.



Dr Shikha Rani
MD Radiologist

Suraksha Diagnostic Private Limited
E-mail: info@surakshanet.com | Website: www.surakshanet.com

Suraksha DIAGNOSTICS

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Age	: 34 Y 2 M 21 D	**Collection Date:**	
Gender	: F	**Report Date**	: 27/Jan/2023 11:23AM

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.

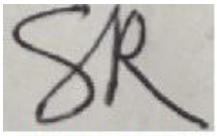
Lateral costo-phrenic angles are clear.

The cardio-thoracic ratio is normal.

Bony thorax reveals no definite abnormality.

IMPRESSION :

Normal study.



Dr Shikha Rani
MD Radiologist

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