MC-2176

Suraksha DIAGNOSTICS

Lab No.	: SG2/06-02-2023/SR7261958	**Lab Add.**	: Sevoke Road,Siliguri 734001
Patient Name	: **PRANAY PRADHAN**	**Ref Dr.**	: Dr.SELF .
Age	: 38 Y 7 M 11 D	**Collection Date**	: 06/Feb/2023 11:26AM
Gender	: M	**Report Date**	: 06/Feb/2023 05:40PM

Test Name	Result	Unit	Bio Ref. Interval	Method
ALKALINE PHOSPHATASE , *GEL SERUM*				
ALKALINE PHOSPHATASE	103.57	U/L	46 - 116 U/L	P-NPP,AMP BUFFER
SGOT/AST , *GEL SERUM*				
SGOT/AST	**76.27**	U/L	15 - 37 U/L	UV WITH P5P
***POTASSIUM, BLOOD ,** *GEL SERUM*				
POTASSIUM,BLOOD	4.00	mEq/L	3.5 - 5.1 mEq/L	ISE INDIRECT
CREATININE, BLOOD , *GEL SERUM*	1.14	mg/dl	0.70 - 1.30 mg/dl	ALKALINE PICRATE
PHOSPHORUS-INORGANIC, BLOOD , *GEL SERUM*				
PHOSPHORUS-INORGANIC,BLOOD	3.1	mg/dl	2.5-4.5 mg/dl	UV PHOSPHOMOLYBDATE
URIC ACID, BLOOD , *GEL SERUM*				
URIC ACID,BLOOD	**9.08**	mg/dl	3.5 -- 7.2 mg/dl	URICASE ,COLORICMETRIC
THYROID PANEL (T3, T4, TSH) , *GEL SERUM*				
T3-TOTAL (TRI IODOTHYRONINE)	1.31	ng/ml	0.60-1.81 ng/ml	CLIA
T4-TOTAL (THYROXINE)	7.7	µg/dL	3.2-12.6 µg/dL	CLIA
TSH (THYROID STIMULATING HORMONE)	1.93	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.

BILIRUBIN (DIRECT) , *GEL SERUM*				
BILIRUBIN (DIRECT)	**0.28**	mg/dL	< 0.2 mg/dl	DIAZOTIZATION
***CHLORIDE, BLOOD ,** .				
CHLORIDE,BLOOD	104.00	mEq/L	98 - 107 mEq/L	ISE INDIRECT

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CALCIUM, BLOOD				
CALCIUM,BLOOD	8.65	mg/L	8.6-10.0 mg/dl	OCPC
***SODIUM, BLOOD ,** *GEL SERUM*				
SODIUM,BLOOD	141.00	mEq/L	136 - 145 mEq/L	ISE INDIRECT
GLUCOSE, FASTING , *BLOOD, NAF PLASMA*				
GLUCOSE,FASTING	93	mg/dl	70 - 100 mg/dL	Hexokinase Method
LIPID PROFILE , *GEL SERUM*				
CHOLESTEROL-TOTAL	106.92	mg/dl	Desirable: < 200 mg/dL Borderline high: 200-239 High: > or =240 mg/dL	CHOLESTEROL OXIDASE, ESTERASE,PEROXIDASE
TRIGLYCERIDES	134.30	mg/dl	NORMAL < 150 BORDERLINE HIGH 150-199 HIGH 200-499 VERY HIGH > 500	ENZYMATIC, END POINT
HDL CHOLESTEROL	**35.29**	mg/dl	NO RISK : >60 mg/dL, MODERATE RISK : 40-60 mg/dL, HIGH RISK : <40 mg/dL	DIRECT MEASURE-PEG
LDL CHOLESTEROL DIRECT	53.0	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	19	mg/dl	< 40 mg/dl	Calculated
CHOL HDL Ratio	**3.0**		LOW RISK 3.3-4.4 AVERAGE RISK 4.47-7.1 MODERATE RISK 7.1-11.0 HIGH RISK >11.0	Calculated
SGPT/ALT , *GEL SERUM*				
SGPT/ALT	**190.35**	U/L	16 - 63 U/L	UV WITH P5P
***GLYCATED HAEMOGLOBIN (HBA1C) ,** *EDTA WHOLE BLOOD*				
GLYCATED HEMOGLOBIN (HBA1C)	5.3	%	***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.

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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:

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TOTAL PROTEIN [BLOOD] ALB:GLO RATIO , .

TOTAL PROTEIN	8.26	g/dL	6.6 - 8.7 g/dL	BIURET METHOD
ALBUMIN	4.2	g/dl	3.4 - 5.0 g/dl	BCP
GLOBULIN	**4.06**	g/dl	1.8-3.2 g/dl	Calculated
AG Ratio	1.03		1.0 - 2.5	Calculated

BILIRUBIN (TOTAL) , *GEL SERUM*

BILIRUBIN (TOTAL)	**1.35**	mg/dL	0.2 - 1.2 mg/dL	DIAZONIUM ION

UREA,BLOOD	29.0	mg/dl	12.8-42.8 mg/dl	UREASE-COLORIMETRIC

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Lab No. : SR7261958	Name : PRANAY PRADHAN	Age/G : 38 Y 7 M 11 D / M	Date : 06-02-2023

DR. SANJAY KR. AGARWALA
MD CONSULTANT BIOCHEMIST

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

1stHour	04	mm/hr	0.00 - 20.00 mm/hr	Westergren

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

ABO	A	Gel Card
RH	POSITIVE	Gel Card

Gel technology Dia Med ID Micro typing system is the latest technology in transfusion Medicine.
It gives more reproducible and standardized test results.
It more repaid, reliable, very sensitive and objective , and hence more consistent and comparable results are obtained.
Single used cards are individualised for every patient and results can be photographed / scanned and stored for future use.
Special instruments that are used only for this technology also reduce risk of any contamination.

Ref:- WHO technical manual on transfusion medicine-Second Edition 2003

(RESULTS ALSO VERIFIED BY : FORWARD AND REVERSE GROUPING (TUBE AND SLIDE METHOD)

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.BARNALI PAUL
MBBS, MD(PATH)

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Patient Name	: **PRANAY PRADHAN**	**Ref Dr.**	: Dr.SELF .
Age	: 38 Y 7 M 11 D	**Collection Date**	:
Gender	: M	**Report Date**	: 06/Feb/2023 02:11PM

DEPARTMENT OF CARDIOLOGY
REPORT OF E.C.G.

HEART RATE	:	65 /min.
RHYTHM	:	Regular sinus.
P-WAVE	:	Normal
P - R INTERVAL	:	160 ms,
QRS DURATION	:	80 ms
QRS CONFIGURATION	:	NORMAL
QRS VOLTAGE	:	R/S in V1 2/8 mm.
		R/S in V6 5/1 mm.
QRS AXIS	:	+30°
Q- Waves	:	No significant Q-wave.
QT TIME	:	Normal.
ST SEGMENT	:	Normal.
T WAVE	:	NORMAL
ROTATION	:	Normal.
OTHER FINDINGS	:	Nil.
IMPRESSION	:	**ECG WITHIN NORMAL LIMIT**.

Dr. ARABINDA SAHA (MD,DM)
CONSULTANT CARDIOLOGIST

Lab No.	: SG2/06-02-2023/SR7261958	**Lab Add.**	:
Patient Name	: **PRANAY PRADHAN**	**Ref Dr.**	: Dr.SELF .
Age	: 38 Y 7 M 11 D	**Collection Date**	:
Gender	: M	**Report Date**	: 06/Feb/2023 03:06PM

DEPARTMENT OF RADIOLOGY
X-RAY REPORT OF CHEST (PA)

FINDINGS:

- Cardiac size appears within normal limits. Margin is well visualised and cardiac silhoutte is smoothly outlined. Shape is within normal limit.
- Lung parenchyma shows no focal lesion. No general alteration of radiographic density. Apices are clear. Bronchovascular lung markings are within normal.
- Lateral costo-phrenic angles are clear.
- Domes of diaphragm are smoothly outlined. Position is within normal limits.

IMPRESSION :

Normal study.

DR. Ziaul Mustafa
MD, Radiodiagnosis

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Patient Name	: **PRANAY PRADHAN**	**Ref Dr.**	: Dr.SELF .
Age	: 38 Y 7 M 11 D	**Collection Date**	:
Gender	: M	**Report Date**	: 09/Feb/2023 04:55PM

DEPARTMENT OF ULTRASONOGRAPHY
REPORT ON EXAMINATION OF WHOLE ABDOMEN

LIVER
Liver is normal in size (148 mm) having normal shape, regular smooth outline and of homogeneous echotexture. **Right lobe shows tiny focal calcification.** No focal parenchymal lesion is evident.Intrahepatic biliary radicles are not dilated.Branches of portal vein are normal.

PORTA
The appearance of porta is normal. Common Bile duct is normal with no intraluminal pathology (Calculi /mass) could be detected at its visualised part. Portal vein is normal at porta.

GALL BLADDER
Gallbladder is physiologically distended. Wall thickness appears normal. **Fundal wall shows tiny echogenic foci.** No calculus. Sonographic Murphys sign is negative.

PANCREAS
Echogenecity appears within limits, without any focal lesion. Shape, size & position appears normal. No Calcular disease noted. Pancreatic duct is not dilated. No peri-pancreatic collection of fluid noted.

SPLEEN
Spleen is normal in size (126 mm). Homogenous and smooth echotexture without any focal lesion. Splenic vein at hilum appears normal. **Splenenculi at hilum measures 5.9 x 4.2 mm.** No definite collaterals could be detected.

KIDNEYS
Both kidneys are normal in shape, size (Rt. kidney 111 mm. & Lt. kidney 106 mm) axes & position. Cortical echogenecity appears normal maintaining corticomedullary differentiation. Margin is regular and cortical thickness is uniform. No calcular disease noted. No hydronephrotic changes detected.

URETERS
Visualised part of upper ureters are not dilated.

URINARY BLADDER
Urinary bladder is distended, wall thickness appeared normal. No intraluminal pathology (calculi / mass) could be detected.

PROSTATE

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Age	: 38 Y 7 M 11 D	**Collection Date**	:
Gender	: M	**Report Date**	: 09/Feb/2023 04:55PM

Prostate is normal in size.Echotexture appears within normal limits. No focal alteration of its echogenecity could bedetectable.
It measures : 33 x 30 x 31 mm.
Approximate weight could be around = 16 gms.

*** Bilateral iliac fossa shows no collection / inflammatory change / sizeable SOL at present sonologically.**

IMPRESSION

Gall bladder cholesterolosis.

Please correlate clinically.

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. Ziaul Mustafa
MD, Radiodiagnosis

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