S61 - LPL-HANUMAN ROAD (MAIN LAB)
ESKAY HOUSE, 54, HANUMAN ROAD, NEW
DELHI -110001
DELHI

Name	: CGHS-2893433-MR. ARVIND YADAV	Collected	: 21/1/2017 12:05:00PM
		Received	: 21/1/2017 12:09:48PM
Lab No.	: 134069518 Age: 42 Years Gender: Male	Reported	: 21/1/2017 6:21:42PM
A/c Status	: P Ref By : CGHS	Report Status	: Final

Test Name	Results	Units	Bio. Ref. Interval
LIPID PROFILE, BASIC, SERUM (Spectrophotometry, Calculated)			
Cholesterol Total	193.00	mg/dL	<200.00
Triglycerides	100.00	mg/dL	<150.00
HDL Cholesterol	45.00	mg/dL	>40.00
LDL Cholesterol	**146.00**	mg/dL	<100.00
VLDL Cholesterol	<8.00	mg/dL	<30.00
Non-HDL Cholesterol	**148.00**	mg/dL	<130.00

Interpretation

NATIONAL LIPID ASSOCIATION RECOMMENDATIONS (NLA-2014)	TOTAL CHOLESTEROL in mg/dL	TRIGLYCERIDE in mg/dL	LDL CHOLESTEROL in mg/dL	NON HDL CHOLESTEROL in mg/dL
Optimal	<200	<150	<100	<130
Above Optimal	-	-	100- 129	130 - 159
Borderline High	200-239	150-199	130-159	160 - 189
High	>=240	200-499	160-189	190 - 219
Very High	-	>=500	>=190	>=220

Note

1. Measurements in the same patient can show physiological& analytical variations. Three serial samples 1 week apart are recommended for Total Cholesterol, Triglycerides, HDL& LDL Cholesterol.
2. As per NLA-2014 guidelines, all adults above the age of 20 years should be screened for lipid status. Selective screening of children above the age of 2 years with a family history of premature cardiovascular disease or those with at least one parent with high total cholesterol is recommended.
3. Low HDL levels are associated with increased risk forAtherosclerotic Cardiovascular disease (ASCVD) due to insufficient HDL being available to participate in reverse cholesterol transport, the process by which cholesterol is eliminated from peripheral tissues.
4. NLA-2014identifies Non HDL Cholesterol(an indicator of all atherogeniclipoproteins such as LDL , VLDL, IDL, Lpa, Chylomicron remnants)along with LDL-cholesterol as co- primary target for cholesterol lowering therapy. Note that major risk factors can modify treatment goals for LDL &Non HDL.
5. Apolipoprotein B is an optional, secondary lipid target for treatment once LDL & Non HDL goals have been achieved.
6. Additional testing for Apolipoprotein B, hsCRP,Lp(a) & LP-PLA2 should be considered among patients with moderate risk for ASCVD for risk refinement

S61 - LPL-HANUMAN ROAD (MAIN LAB)
ESKAY HOUSE, 54, HANUMAN ROAD, NEW DELHI -110001
DELHI

Name	: CGHS-2893433-MR. ARVIND YADAV			Collected	: 21/1/2017 12:05:00PM
				Received	: 21/1/2017 12:09:48PM
Lab No.	: 134069518	Age: 42 Years	Gender: Male	Reported	: 21/1/2017 6:21:42PM
A/c Status	: P	Ref By : CGHS		Report Status	: Final

Test Name	Results	Units	Bio. Ref. Interval

Treatment Goals as per NLA 2014

RISK CATEGORY	NON HDL CHLOESTEROL (NON HDL-C) (mg/dL)	LDL CHOLESTEROL (LDL-C)(mg/dL)	APOLIPOPROTEIN B (mg/dL)
Low/Moderate/High	<130	<100	<90
Very High	<100	<70	<80

LIVER PANEL 1; LFT,SERUM
(Spectrophotometry)

Test Name	Results	Units	Bio. Ref. Interval
Bilirubin Total	**1.95**	mg/dL	0.30 - 1.20
Bilirubin Direct	**0.28**	mg/dL	<0.20
Bilirubin Indirect	**1.67**	mg/dL	<1.10
AST (SGOT)	32	U/L	<50
ALT (SGPT)	46	U/L	<50
GGTP	16	U/L	<55
Alkaline Phosphatase (ALP)	65	U/L	30 - 120
Total Protein	8.20	g/dL	6.40 - 8.30
Albumin	4.88	g/dL	3.50 - 5.20
A : G Ratio	1.47		0.90 - 2.00

Note : In known cases of Chronic Liver disease due to Viral Hepatitis B & C, Alcoholic liver disease or Non alcoholic fatty liver disease, Enhanced liver fibrosis (ELF) test may be used to evaluate liver fibrosis.

KIDNEY PANEL; KFT,SERUM
(Spectrophotometry, Indirect ISE)

Test Name	Results	Units	Bio. Ref. Interval
Urea	29.00	mg/dL	17.00 - 43.00
Creatinine	0.74	mg/dL	0.67 - 1.17
Uric Acid	**7.30**	mg/dL	3.50 - 7.20
Calcium, Total	10.00	mg/dL	8.80 - 10.60
Phosphorus	3.60	mg/dL	2.40 - 4.40
Alkaline Phosphatase (ALP)	65	U/L	30 - 120
Total Protein	8.20	g/dL	6.40 - 8.30
Albumin	4.88	g/dL	3.50 - 5.20
A : G Ratio	1.47		0.90 - 2.00
Sodium	**135.00**	mEq/L	136.00 - 146.00

Dr Lal PathLabs

National Reference Lab: Sector-18, Block-E, Rohini, New Delhi - 110 085
Main Lab: 54, Eskay House, Hanuman Road, New Delhi - 110 001
Tel: 011 - 3040-3210, Fax: 011 - 3040-3204
E-mail: lalpathlabs@lalpathlabs.com Web: www.lalpathlabs.com

S61 - LPL-HANUMAN ROAD (MAIN LAB)
ESKAY HOUSE, 54, HANUMAN ROAD, NEW DELHI -110001
DELHI

Name	: CGHS-2893433-MR. ARVIND YADAV	**Collected**	: **21/1/2017 12:05:00PM**
		Received	: **21/1/2017 12:09:48PM**
Lab No.	: 134069518 Age: 42 Years Gender: **Male**	**Reported**	: **21/1/2017 6:21:42PM**
A/c Status	: P Ref By : CGHS	**Report Status**	: **Final**

Test Name	Results	Units	Bio. Ref. Interval
Potassium	3.88	mEq/L	3.50 - 5.10
Chloride	**99.00**	mEq/L	101.00 - 109.00

GLUCOSE, FASTING (F) AND POST MEAL, PLASMA
(Hexokinase)

Glucose Fasting	81.00	mg/dL	70.00 - 100.00
Glucose (PP)	87.00	mg/dL	70.00 - 140.00

Note

1. The diagnosis of Diabetes requires a fasting plasma glucose of > or = 126 mg/dL and/or a random / 2 hr post glucose value of > or = 200 mg/dL on at least 2 occasions

2. Very low glucose levels cause severe CNS dysfunction

3. Very high glucose levels (>450 mg/dL in adults) may result in Diabetic Ketoacidosis & is considered critical

Interpretation

Status	Fasting plasma glucose in mg/dL	PP plasma glucose in mg/dL
Normal	70-100	70-140
Impaired fasting glucose	101-125	70-140
Impaired glucose tolerance	70-100	141-199
Pre-Diabetes	101-125	141-199
Diabetes mellitus	>126	>200

S61 - LPL-HANUMAN ROAD (MAIN LAB)
ESKAY HOUSE, 54, HANUMAN ROAD, NEW DELHI -110001
DELHI

Name	:	CGHS-2893433-MR. ARVIND YADAV		**Collected**	: **21/1/2017 12:05:00PM**
				Received	: **21/1/2017 12:09:48PM**
Lab No.	:	134069518	**Age:** 42 Years **Gender:** Male	**Reported**	: **21/1/2017 6:21:42PM**
A/c Status	:	P	**Ref By :** CGHS	**Report Status**	: **Final**

Test Name	Results	Units	Bio. Ref. Interval
URINE EXAMINATION, ROUTINE; URINE, R/E (Automated Strip Test, Microscopy)			
Physical			
Colour	Light Yellow		Pale yellow
Specific Gravity	1.010		1.001 - 1.030
pH	8		5.0 - 8.0
Chemical			
Proteins	Nil		Nil
Glucose	Nil		Nil
Ketones	Nil		Nil
Bilirubin	Nil		Nil
Urobilinogen	Normal		Normal
Leucocyte Esterase	Negative		Negative
Nitrite	Negative		Negative
Microscopy			
R.B.C.	Negative		Negative
Pus Cells	Negative		0-5 WBC / hpf
Epithelial Cells	Few		Few
Casts	Nil		Nil /lpf
Crystals	Nil		Nil
Others	Nil		-
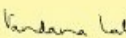
S61 - LPL-HANUMAN ROAD (MAIN LAB)
ESKAY HOUSE, 54, HANUMAN ROAD, NEW
DELHI -110001
DELHI

Name	:	CGHS-2893433-MR. ARVIND YADAV				Collected	:	21/1/2017 12:05:00PM
						Received	:	21/1/2017 12:09:48PM
Lab No.	:	134069518	Age: 42 Years	Gender:	Male	Reported	:	21/1/2017 6:21:42PM
A/c Status	:	P	Ref By :	CGHS		Report Status	:	Final

Test Name	Results	Units	Bio. Ref. Interval
HEMOGRAM (Electrical Impendance & VCS, Capillary photometry,Photometry)			
Hemoglobin	**12.80**	g/dL	13.00 - 17.00
Packed Cell Volume (PCV)	**39.80**	%	40.00 - 50.00
RBC Count	**6.40**	mill/mm3	4.50 - 5.50
MCV	**62.10**	fL	80.00 - 100.00
MCH	**20.00**	pg	27.00 - 32.00
MCHC	32.20	g/dL	32.00 - 35.00
Red Cell Distribution Width (RDW)	**16.70**	%	11.50 - 14.50
Total Leukocyte Count (TLC)	5.30	thou/mm3	4.00 - 10.00
Differential Leucocyte Count (DLC)			
Segmented Neutrophils	55.50	%	40.00 - 80.00
Lymphocytes	35.20	%	20.00 - 40.00
Monocytes	8.40	%	2.00 - 10.00
Eosinophils	**0.70**	%	1.00 - 6.00
Basophils	0.20	%	<2.00
Absolute Leucocyte Count			
Neutrophils	2.94	thou/mm3	2.00 - 7.00
Lymphocytes	1.87	thou/mm3	1.00 - 3.00
Monocytes	0.45	thou/mm3	0.20 - 1.00
Eosinophils	0.04	thou/mm3	0.02 - 0.50
Basophils	0.01	thou/mm3	0.01 - 0.10
Platelet Count	175.0	thou/mm3	150.00 - 450.00
ESR	10	mm/hr	0 - 15

Advised: Hb HPLC to rule out Thalassemia Minor
Note

1. As per the recommendation of International council for Standardization in Hematology, the differential leucocyte counts are additionally being reported as absolute numbers of each cell in per unit volume of blood

2. Test conducted on EDTA whole blood

S61 - LPL-HANUMAN ROAD (MAIN LAB)
ESKAY HOUSE, 54, HANUMAN ROAD, NEW
DELHI -110001
DELHI

(Hony) Brig. Dr. Arvind Lal
M.B.B.S., D.C.P.
Padma Shri
FMR HONORARY PHYSICIAN TO THE PRESIDENT OF INDIA

Dr. Vandana Lal
M.D (PATH), IFCAP
Chief of Pathology
SHIROMANI AWARD WINNER

Name	:	CGHS-2893433-MR. ARVIND YADAV		**Collected**	: **21/1/2017 12:05:00PM**
				Received	: **21/1/2017 12:09:48PM**
Lab No.	:	134069518 **Age: 42 Years**	**Gender: Male**	**Reported**	: **21/1/2017 6:21:42PM**
A/c Status	:	P **Ref By : CGHS**		**Report Status**	: **Final**

Test Name	Results	Units	Bio. Ref. Interval
VITAMIN B12; CYANOCOBALAMIN, SERUM (CLIA)	245.00	pg/mL	211.00 - 911.00

Note: To differentiate vitamin B12 & folate deficiency, measurement of Methyl malonic acid in urine & serum Homocysteine level is suggested

Comments

Vitamin B12 performs many important functions in the body, but the most significant function is to act as co-enzyme for reducing ribonucleotides to deoxyribonucleotides, a step in the formation of genes. Inadequate dietary intake is not the commonest cause for cobalamine deficiency. The most common cause is malabsorption either due to atrophy of gastric mucosa or diseases of terminal ileum. Cobalamine deficiency leads to Megaloblastic anemia and demyelination of large nerve fibres of spinal cord. Normal body stores are sufficient to last for 3-6 years. Sources of Vitamin B12 are liver, shellfish, fish, meat, eggs, milk, cheese & yogurt.

Decreased Levels

- **Lack of Intrinsic factor:** Total or partial gastrectomy, Atrophic gastritis, Intrinsic factor antibodies
- **Malabsorption**: Regional ileitis, resected bowel, Tropical Sprue, Celiac disease, pancreatic insufficiency, bacterial overgrowth & achlorhydria
- **Loss of ingested vitamin B12:** fish tapeworm
- **Dietary deficiency:** Vegetarians
- **Congenital disorders:** Orotic aciduria & transcobalamine deficiency
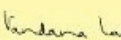- **Increased demand**: Pregnancy specially last trimester

Increased Levels

Chronic renal failure, Congestive heart failure, Acute & Chronic Myeloid Leukemia, Polycythemia vera, Carcinomas with liver metastasis, Liver disease, Drug induced cholestasis & Protein malnutrition
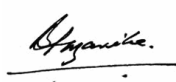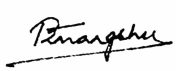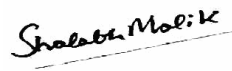
Name	:	CGHS-2893433-MR. ARVIND YADAV			Collected	: 21/1/2017 12:05:00PM
					Received	: 21/1/2017 12:09:48PM
Lab No.	:	134069518	Age: 42 Years	Gender: Male	Reported	: 21/1/2017 6:21:42PM
A/c Status	:	P	Ref By : CGHS		Report Status	: Final

Test Name	Results	Units	Bio. Ref. Interval

Dr. Anil Arora
MD (Pathology)
Consultant Pathologist

Dr Biswadip Hazarika
MD (Pathology)
Consultant Pathologist

Dr Himangshu Mazumdar
MD (Biochemistry)
Consultant Biochemist

Dr. Nimmi Kansal
MD (Biochemistry)
HOD Biochem & IA

Dr. Shalabh Malik
MD (Microbiology)
HOD Micro & Clinical Path

------------------------------End of report ------------------------------