COMPLETE BLOOD COUNT (CBC with E.S.R).

Reference No.	: 191048649	**Reg. Date**	: 03-Oct-2019 13:16	**Age/Sex**	: 50 Years MALE
Patient	: MR. ANISH CHANANA	**Print Date**	: 03-Oct-2019	**Delivery**	:
Ref. Doctor	: SELF	**Hospital / NH**	: NA		

Investigation	Result	Biological Reference Interval	Units
HEMOGLOBIN, Blood(SLS Hemoglobin)	16.6	13.00 - 17.00	g/dl
PACKED CELL VOLUME, Blood(Impedence)	49.8	40 - 50	%
TLC, Blood (Flow cytometry)	7300.00	4000 - 11000	/cumm
D.L.C., Blood (Flow Cytometry)			
POLYMORPHS	50.0	44.00 - 68.00	%
LYMPHOCYTES	41.00	25.00 - 44.00	%
EOSINOPHILS	2.0	0.00 - 4.00	%
MONOCYTES	7.00	0.00 - 7.00	%
ABSOLUTE NEUTROPHIL COUNT(Blood, Calculated).	3650.00	2000 - 7000	/Cu mm
ABSOLUTE EOSINOPHIL COUNT BLOOD, (Calculated)	146.00	20 - 500	/Cu mm
PLATELET COUNT, Blood (Impedence)	277.00	150 - 410	1000/Cumm
E.S.R, Blood(Capillary Photometry)	4.00	0.00 - 15.00	1st hour
R B C COUNT, Blood (Impedence)	5.48	4.5 - 5.5	10^12/L
MCV, Blood(Calculated)	90.88	83 - 101	fl
MCH, Blood(Calculated)	30.29	27.00 - 32.60	Pg
MCHC, Blood(Calculated)	33.33	31.50 - 34.50	gm/dl
RDW, Blood (Calculated)	13.0	11.6 - 14.0	%

COMMENTS ON PERIPHERAL SMEAR : (Microscopy, Leishman stain)
The red blood cells are normocytic and normochromic. The white cells are normal. The platelets are adequate.

*Test performed by SYSMEX XN-550.

Absolute Neutrophil Count (ANC) <1000 - Markedly increased susceptibility of infectious diseases.
- Absolute Neutrophil Count (ANC) <500 control of endogenous microbial flora impaired.
- Absolute Neutrophil Count (ANC) <200 absent inflammatory processes.

Comments:

*** END OF REPORT ***

+91-11-49575700
+91-8130415737
lifelinelab@lifelinelaboratory.com
www.lifelinelaboratory.com
H-11, Green Park Extension, New Delhi - 110 016

Meenu Beri

Consultant Pathologist / Microbiologist

REPORT

Reference No.	: 191048649	**Reg. Date**	: 03-Oct-2019 13:16	**Age/Sex**	: 50 Years MALE
Patient	: MR. ANISH CHANANA	**Print Date**	: 03-Oct-2019	**Delivery**	:
Ref. Doctor	: SELF	**Hospital / NH**	: NA		

Investigation	Result	Biological Reference Interval	Units
FASTING GLUCOSE, Plasma(Hexokinase)	92.4	60 - 100	mg/dl

Comments:

*** END OF REPORT ***

+91-11-49575700
+91-8130415737
lifelinelab@lifelinelaboratory.com
www.lifelinelaboratory.com
H-11, Green Park Extension,
New Delhi - 110 016

Meenu Beri

Consultant Pathologist / Microbiologist

HbA1c

Reference No.	: 191048649	**Reg. Date**	: 03-Oct-2019 13:16	**Age/Sex**	: 50 Years MALE
Patient	: MR. ANISH CHANANA	**Print Date**	: 03-Oct-2019	**Delivery**	:
Ref. Doctor	: SELF	**Hospital / NH**	: NA		

Investigation	Result	Units
GLYCOSYLATED HEMOGLOBIN (HbA1c) Immunoturbidimetry	5.5	%

REFERENCE RANGE:

4.00 - 5.60 %	Normal
5.70 - 6.40 %	Prediabetes (The values should be co-related with Glucose levels)
6.10 - 7.00 %	HbA1C indicates very good control in diabetes
7.10 - 8.00 %	HbA1C indicates adequate control in diabetes
8.10 - 9.00 %	HbA1C indicates suboptimal control in diabetes
>9.00%	HbA1C indicates poor control in diabetes

HbA1c (%)	Average Glucose mg/dl
5	97
6	126
7	154
8	183
9	212
10	240
11	269
12	298

Note :

An estimated average glucose (eAG) can be calculated from the HbA1c values. The A1c test is also used to monitor the glucose control of diabetics over time. This helps to minimize the complications caused by chronically elevated glucose levels, such as progressive damage to kidneys, eyes, cardiovascular system, and nerves.

The A1c test, however, should not be used for screening for cystic fibrosis-related diabetes, people who have had recent severe bleeding or blood transfusions, those with chronic kidney or liver disease, or people with blood disorders such as iron-deficiency anemia, vitamin B12 deficiency anemia, and some Hemoglobin variants (e.g., patients with sickle cell disease or Thalassemia).

Comments:

*** END OF REPORT ***

+91-11-49575700
+91-8130415737
lifelinelab@lifelinelaboratory.com
www.lifelinelaboratory.com
H-11, Green Park Extension,
New Delhi - 110 016

Consultant Pathologist / Microbiologist

REPORT

Reference No.	: 191048649	**Reg. Date**	: 03-Oct-2019 13:16	**Age/Sex**	: 50 Years	MALE
Patient	: MR. ANISH CHANANA	**Print Date**	: 03-Oct-2019	**Delivery**	:	
Ref. Doctor	: SELF	**Hospital / NH**	: NA			

Investigation	Result	Biological Reference Interval	Units
CRP-HS, Serum(Immunoturbidimetry)	0.76	0.00 - 1.00	mg/L

CVD Risk Assessment

Low : 0.00 - 1.00 mg/L
Average : 1.00 - 3.00 mg/L
High : More Than 3.00 mg/L

Reference Range For :-

Neonates 0.10 - 4.10 mg/L
Children 0.10 - 2.80 mg/L
Comments:

*** END OF REPORT ***

+91-11-49575700
+91-8130415737
lifelinelab@lifelinelaboratory.com
www.lifelinelaboratory.com
H-11, Green Park Extension,
New Delhi - 110 016

Meenu Beri

Consultant Pathologist / Microbiologist

REPORT

Reference No.	: 191048649	**Reg. Date**	: 03-Oct-2019 13:16	**Age/Sex**	: 50 Years	MALE
Patient	: MR. ANISH CHANANA	**Print Date**	: 03-Oct-2019	**Delivery**	:	
Ref. Doctor	: SELF	**Hospital / NH**	: NA			

Investigation	Result	Biological Reference Interval	Units
CRP, Serum(Immunoturbidimetry)	0.08	<0.50	mg/dl

INTERPRETATION :-

ADULTS	<0.50	mg/dl
NEWBORN UP TO 3 WEEKS	<0.41	mg/dl
INFANTS AND CHILDREN	<0.28	mg/dl

Comments:

*** END OF REPORT ***

+91-11-49575700
+91-8130415737
lifelinelab@lifelinelaboratory.com
www.lifelinelaboratory.com
H-11, Green Park Extension,
New Delhi - 110 016

Meenu Beri

Consultant Pathologist / Microbiologist

LIPID PROFILE

Reference No.	: 191048649	**Reg. Date**	: 03-Oct-2019 13:16	**Age/Sex**	: 50 Years MALE
Patient	: MR. ANISH CHANANA	**Print Date**	: 03-Oct-2019	**Delivery**	:
Ref. Doctor	: SELF	**Hospital / NH**	: NA		

Investigation	Result	Biological Reference Interval	Units
CHOLESTROL, SERUM (Enz. Colorimetry)	189.2	80.00 - 200.00	mg/dl
HDL CHOLESTEROL (Enz.Colorimetry)	48.6	30.00 - 60.00	mg/dl
TRIGLYCERIDES, SERUM (Enz.Colorimetry)	**234.72**	40.00 - 150.00	mg/dl
VLDL (Calculated)	24.90	24.00 - 45.00	
LDL CHOLESTEROL (Enz.Colorimetry)	**115.70**	30 - 100	mg/dl
LDL / HDL RATIO (Calculated)	2.38	0.00 - 3.00	
CHOLESTEROL / HDL RATIO(Calculated)	3.89	0.00 - 4.00	

INTERPRETATION :-
Desirable : Less than 200 mg/dl
Borderline High Risk : 200 to 239 mg/dl
High Risk : 240 mg/dl and over, on repeated values
Optimal Level for Cardiac Patients : Less than 200 mg/dl
TRIGLYCERIDES REFERECE RANGE
> Normal - Less than 150 mg/dL,
> Borderline high - 150 to 199 mg/dL
> High - 200 to 499 mg/dL
> Very high - 500 mg/dL or above
HDL-C : High HDL has generally been found to be protective, decreasing the risk of coronary Artery disease (CAD) in most people. However, some recent studies have shown that in some people with high HDL, the HDL is not protective and may, in fact result in higher risk for CAD than in people with normal HDL levels. In one study it was shown that people with CAD and high HDL had underlying genetic anomalies in enzymes important in lipid turnover. Another study showed that high levels of abnormally large HDL particles were associated with increased risk of CAD. Factors that elevate HDL concentrations include chronic alcoholism, treatment with oral estrogen replacement therapy, extensive aerobic exercise, and treatment with niacin, statins, or fibrates. Smoking reduces levels of HDL cholesterol, while quitting smoking leads to a rise in the plasma HDL level.
LDL Reference Range : Levels in terms of risk for coronary heart disease :
Adult levels:
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
Comments:

*** END OF REPORT ***

+91-11-49575700
+91-8130415737
lifelinelab@lifelinelaboratory.com
www.lifelinelaboratory.com
H-11, Green Park Extension,
New Delhi - 110 016

Consultant Pathologist / Microbiologist

REPORT

Reference No.	: 191048649	**Reg. Date**	: 03-Oct-2019 13:16	**Age/Sex**	: 50 Years MALE
Patient	: MR. ANISH CHANANA	**Print Date**	: 03-Oct-2019	**Delivery**	:
Ref. Doctor	: SELF	**Hospital / NH**	: NA		

Investigation	Result	Biological Reference Interval	Units
IRON, Serum(Ferrozine)	133.4	33.00 - 193.00	ug/dl
UIBC Serum(Ferrozine)	230.3	125.00 - 345.00	ug/dl
TIBC.(Calculated)	363.70	250.00 - 450.00	ug/dl

Comments:

*** END OF REPORT ***

+91-11-49575700
+91-8130415737
lifelinelab@lifelinelaboratory.com
www.lifelinelaboratory.com
H-11, Green Park Extension,
New Delhi - 110 016

Consultant Pathologist / Microbiologist

L.F.T WITH G.G.T.P

Reference No.	: 191048649	**Reg. Date**	: 03-Oct-2019 13:16	**Age/Sex**	: 50 Years MALE
Patient	: MR. ANISH CHANANA	**Print Date**	: 03-Oct-2019	**Delivery**	:
Ref. Doctor	: SELF	**Hospital / NH**	: NA		

Investigation	Result	Biological Reference Interval	Units
BILIRUBIN (TOTAL), Serum(Diazo)	0.51	0.00 - 1.20	mg/dl
BILIRUBIN (DIRECT), Serum(Diazo)	0.12	0 - 0.30	mg/dl
BILIRUBIN (INDIRECT), Serum(Calculated)	0.39	0.00 - 0.70	mg/dl
TOTAL PROTEINS Serum(Biuret)	7.2	6.40 - 8.30	gms/dl
ALBUMIN, Serum(BCG)	4.3	3.50 - 5.20	gms/dl
GLOBULIN (Calculated)	2.90	2.00 - 3.50	gms/dl
A:G RATIO (Calculated)	1.48	1.00 - 2.00	
ALKALINE PHOSPHATASE,Serum(Colorimetry)	64.8	40.00 - 130.00	U/L
SGOT, Serum(IFCC)	20.2	1.00 - 40.00	U/l
SGPT, Serum(IFCC)	18.1	2.00 - 41.00	U/l
GGTP, Serum(Enz.Colorimetry)	30.5	8.00 - 61.00	U/L

Comments:

*** END OF REPORT ***

+91-11-49575700
+91-8130415737
lifelinelab@lifelinelaboratory.com
www.lifelinelaboratory.com
H-11, Green Park Extension,
New Delhi - 110 016

Consultant Pathologist / Microbiologist

REPORT

Reference No.	: 191048649	**Reg. Date**	: 03-Oct-2019 13:16	**Age/Sex**	: 50 Years MALE
Patient	: MR. ANISH CHANANA	**Print Date**	: 03-Oct-2019	**Delivery**	:
Ref. Doctor	: SELF	**Hospital / NH**	: NA		

Investigation	Result	Biological Reference Interval	Units
FERRITIN, Serum,(CLIA)	67.20	22.00 - 322.00	ng/ml

Summary and Explanation of the Test:

Ferritin is a compound composed of iron molecules bound to apoferritin, a protein shell. Stored iron represents about 25% of total iron in the body, and most of this iron is stored as ferritin.Ferritin is found in many body cells, but especially those in the liver, spleen, bone marrow, and in reticuloendothelial cells.Ferritin plays a significant role in the absorption, storage, and release of iron. As the storage form of iron, ferritin remains in the body tissues until it is needed for erythropoiesis. When needed, the iron molecules are released from the apoferritin shell and bind to transferrin, the circulating plasma protein that transports iron to the erythropoietic cells.Although dietary iron is poorly absorbed, the body conserves its iron stores carefully, reabsorbing most of the iron released from the breakdown of red blood cells. As a result, the body normally loses only 1 to 2 mg of iron per day, which is generally restored by the iron absorbed in the small intestine from dietary sources.Ferritin is found in serum in low concentrations and is directly proportional to the body~s iron stores.Serum ferritin concentration, when analyzed with other factors such as serum iron, iron-binding capacity, and tissue iron stores, is valuable in the diagnosis of iron-deficiency anemias, anemias of chronic infection, and conditions such as thalassemia and hemochromatosis that are associated with iron overload. Measurement of serum ferritin is particularly valuable in distinguishing iron-deficiency anemias caused by low iron stores from those resulting from inadequate iron utilization.

Limitations:

Serum ferritin values are elevated in the presence of the following conditions and do not reflect actual body iron stores:

- inflammation
- significant tissue destruction
- liver disease
- malignancies such as acute leukemia and Hodgkin,s disease
- therapy with iron supplements

Some estimated ferritin levels is various pathophysiological conditions

---

Category	Range(ng/mL)	Category	Range(ng/mL)
Iron Deficiency	0.68 - 34.5	Other Anemias	13.0 - 1390.8
Iron Overload	334.6 - 8573.0	Renal Dialysis	31.3 - 1321.2
Chronic Liver Disease	7.9 - 12,826.0		

Heterophilic antibodies in human serum can react with reagent immunoglobulins, interfering with in vitro immunoassays.Patients routinely exposed to animals or to animal serum products can be prone to this interference and anomalous values may be observed.

Comments:

*** END OF REPORT ***

+91-11-49575700
+91-8130415737
lifelinelab@lifelinelaboratory.com
www.lifelinelaboratory.com
H-11, Green Park Extension,
New Delhi - 110 016

Consultant Pathologist / Microbiologist

KIDNEY FUNCTION TEST (KFT)

Reference No.	: 191048649	**Reg. Date**	: 03-Oct-2019 13:16	**Age/Sex**	: 50 Years MALE
Patient	: MR. ANISH CHANANA	**Print Date**	: 03-Oct-2019	**Delivery**	:
Ref. Doctor	: SELF	**Hospital / NH**	: NA		

Investigation	Result	Biological Reference Interval	Units
UREA Serum(Urease)	19.08	12.00 - 45.00	mg/dl
UREA NITROGEN(Calculated)	8.92	6.00 - 20.00	mg/dl
CREATININE SERUM(Jaffe)	0.76	0.70 - 1.20	mg/dl
URIC ACID, Serum(Colorimetry)	5.8	3.40 - 7.00	mg/dl
CALCIUM, Serum(BAPTA)	9.12	8.60 - 10.00	mg/dl
PHOSPHATE, Serum(Phosphomolybdate)	4.5	2.50 - 4.80	mg/dl
SODIUM, Serum(ISE Indirect)	137	130.00 - 149.00	meq/L
POTASSIUM, Serum(ISE Indirect)	**5.11**	3.50 - 5.00	meq/L
CHLORIDE, Serum(ISE Indirect)	101	97.0 - 107.0	meq/L

Comments:

*** END OF REPORT ***

+91-11-49575700
+91-8130415737
lifelinelab@lifelinelaboratory.com
www.lifelinelaboratory.com
H-11, Green Park Extension,
New Delhi - 110 016

Consultant Pathologist / Microbiologist

Anti TG.

Reference No.	: 191048649	**Reg. Date**	: 03-Oct-2019	13:16	**Age/Sex**	: 50 Years	MALE
Patient	: MR. ANISH CHANANA	**Print Date**	: 03-Oct-2019		**Delivery**	:	
Ref. Doctor	: SELF	**Hospital / NH**	: NA				

Investigation	Result	Biological Reference Interval	Units
Anti Thyroglobulin (Autoantibodies against thyroglobulin, Serum,(ECLIA)	16.30	0.00 - 115.00	IU/mL

Comments:

*** END OF REPORT ***

+91-11-49575700
+91-8130415737
lifelinelab@lifelinelaboratory.com
www.lifelinelaboratory.com
H-11, Green Park Extension,
New Delhi - 110 016

Consultant Pathologist / Microbiologist

Anti TPO.

Reference No.	: 191048649	**Reg. Date**	: 03-Oct-2019 13:16	**Age/Sex**	: 50 Years	MALE
Patient	: MR. ANISH CHANANA	**Print Date**	: 03-Oct-2019	**Delivery**	:	
Ref. Doctor	: SELF	**Hospital / NH**	: NA			

Investigation	Result	Biological Reference Interval	Units
Anti TPO (ECLIA)	**51.60**	0.00 - 34.00	IU/mL

Comments:

*** END OF REPORT ***

+91-11-49575700
+91-8130415737
lifelinelab@lifelinelaboratory.com
www.lifelinelaboratory.com
H-11, Green Park Extension,
New Delhi - 110 016

Consultant Pathologist / Microbiologist

THYROID PROFILE.

Reference No.	: 191048649	**Reg. Date**	: 03-Oct-2019 13:16	**Age/Sex**	: 50 Years MALE
Patient	: MR. ANISH CHANANA	**Print Date**	: 03-Oct-2019	**Delivery**	:
Ref. Doctor	: SELF	**Hospital / NH**	: NA		

Investigation	Result	Biological Reference Interval	Units
FT3, Serum,(CLIA)	5.53	3.10 - 6.80	pmol/L
FREE T4, Serum,(CLIA)	17.43	12.00 - 22.00	pmol/l
TSH, (ULTRASENSITIVE) Serum,(CLIA)	1.91	0.27 - 4.20	uIU/ml

* PHYSIOLOGICAL ALTERATIONS IN THYROID VALUES

FT3

Adults	3.1 - 6.8
Children & adolescence	
4-30 days	2.6 -8.3
2-12 mths	2.4 -9.8
2-6 years	2.9 -9.5
7-11 years	2.5 -9.2
12-19 years	3.1 -9.2

Adults

TSH 0.27 - 4.20 uIU/ml

Children	TSH (Ranges uIU/ml)
Midgestation Fetus	0.70 - 11.00
LBW cord serum	1.30 - 20.00
Term Infants	1.30 - 19.00
3 days	1.10 - 17.00
10 weeks	0.60 - 10.00
14 months	0.40 - 7.00
5 years	0.40 - 6.00

Pregnancy	Units	First Trimester	Second Timester	Third Trimester
Free T3	pmol/L	3.00 - 5.70	2.80 - 4.20	2.40 - 4.10
Free T4	pmol/L	11.10 - 24.10	8.20 - 24.70	8.20 - 24.70
TSH	uIU/mL	0.20 - 3.50	0.20 - 3.50	0.20 - 3.50

Comments:

*** END OF REPORT ***

+91-11-49575700
+91-8130415737
lifelinelab@lifelinelaboratory.com
www.lifelinelaboratory.com
H-11, Green Park Extension,
New Delhi - 110 016

Consultant Pathologist / Microbiologist

TESTOSTERONE

Reference No.	: 191048649	**Reg. Date**	: 03-Oct-2019	13:16	**Age/Sex**	: 50 Years	MALE
Patient	: MR. ANISH CHANANA	**Print Date**	: 03-Oct-2019		**Delivery**	:	
Ref. Doctor	: SELF	**Hospital / NH**	: NA				

Investigation	Result	Biological Reference Interval	Units
TESTOSTERONE, Serum,(CLIA)	7.5	0.86 - 7.88	ng/ml

Tanner Stage

Male	ng/mL
Tanner stage1	<0.07-0.50
Tanner stage2	<0.07-2.16
Tanner stage3	0.10-7.55
Tanner stage4	0.67-7.71
Tanner stage5	0.67-9.42

Females	
Tanner stage1	<0.07-0.71
Tanner stage2	<0.07-0.47
Tanner stage3	<0.07-0.37
Tanner stage4	<0.07-0.46
Tanner stage5	0.11-0.60

Comments:

*** END OF REPORT ***

+91-11-49575700
+91-8130415737
lifelinelab@lifelinelaboratory.com
www.lifelinelaboratory.com
H-11, Green Park Extension,
New Delhi - 110 016

Consultant Pathologist / Microbiologist

VITAMIN B12.

Reference No.	: 191048649	**Reg. Date**	: 03-Oct-2019 13:16	**Age/Sex**	: 50 Years MALE
Patient	: MR. ANISH CHANANA	**Print Date**	: 03-Oct-2019	**Delivery**	:
Ref. Doctor	: SELF	**Hospital / NH**	: NA		

Investigation	Result	Biological Reference Interval	Units
VITAMIN B12, Serum,(ECLIA)	453.10		pg/ml

Category Range (pg/mL)	Range (pg/mL)
Normal	197-771
Deficient	<197.00

Summary and Explanation of the Test

Vitamin B12, or cyanocobalamin, is a complex corrinoid compound containing four pyrrole rings that surround a single cobalt atom. Humans obtain vitamin B12 exclusively from animal dietary sources, such as meat, eggs, and milk. Vitamin B12 requires intrinsic factor, a protein secreted by the parietal cells in the gastric mucosa, for absorption. Vitamin B12 and intrinsic factor form a complex that attaches to receptors in the ileal mucosa, where proteins known as trans-cobalamins transport the vitamin B12 from the mucosal cells to the blood and tissues. Most vitamin B12 is stored in the liver as well as in the bone marrow and other tissues. Vitamin B12 and folate are critical to normal DNA synthesis, which in turn affects erythrocyte maturation. Vitamin B12 is also necessary for myelin sheath formation and maintenance. The body uses its B12 stores very economically, reabsorbing vitamin B12 from the ileum and returning it to the liver so that very little is excreted.

Clinical and laboratory findings for B12 deficiency include neurological abnormalities, decreased serum B12 levels, and increased excretion of methylmalonic acid. The impaired DNA synthesis associated with vitamin B12 deficiency causes macrocytic anemias. These anemias are characterized by abnormal maturation of erythrocyte precursors in the bone marrow, which results in the presence of megaloblasts and in decreased erythrocyte survival. Pernicious anemia is a macrocytic anemia caused by vitamin B12 deficiency that is due to lack of intrinsic factor. Low vitamin B12 intake, gastrectomy, diseases of the small intestine, malabsorption, and trans-cobalamin deficiency can also cause vitamin B12 deficiency.

Limitations

---

* kindly Correlate Clinically

Comments:

*** END OF REPORT ***

+91-11-49575700
+91-8130415737
lifelinelab@lifelinelaboratory.com
www.lifelinelaboratory.com
H-11, Green Park Extension,
New Delhi - 110 016

Consultant Pathologist / Microbiologist

VITAMIN D, 25 - HYDROXY

Reference No.	: 191048649	**Reg. Date**	: 03-Oct-2019 13:16	**Age/Sex**	: 50 Years MALE
Patient	: MR. ANISH CHANANA	**Print Date**	: 03-Oct-2019	**Delivery**	:
Ref. Doctor	: SELF	**Hospital / NH**	: NA		

Investigation	Result	Biological Reference Interval	Units
VITAMIN D, 25-HYDROXY, Serum,(CLIA)	**50.0**	75.00 - 250.00	nmol/L

Comments:

*** END OF REPORT ***

+91-11-49575700
+91-8130415737
lifelinelab@lifelinelaboratory.com
www.lifelinelaboratory.com
H-11, Green Park Extension,
New Delhi - 110 016

Meenu Beri

Consultant Pathologist / Microbiologist

Lifeline LABORATORY

ISO 9001:2015 043-A

REPORT

Reference No.	: 191048649	**Reg. Date**	: 03-Oct-2019 13:16	**Age/Sex**	: 50 Years MALE
Patient	: MR. ANISH CHANANA	**Print Date**	: 03-Oct-2019	**Delivery**	:
Ref. Doctor	: SELF	**Hospital / NH**	: NA		

Investigation	Result	Biological Reference Interval	Units
HOMOCYSTEINE, Serum (CLIA)	14.8	0.00 - 15.00	umol/L

Interpretation

Group	Folate supplemented	Nonsupplemented
Fasting/basal tHcy, µmol/L		
Pregnancy	8	10
Children < 15 years	8	10
Adults 15-65 years	12	15
Elderly > 65 years	16	20

Summary

Homocysteine (Hcy) is a thiol-containing amino acid produced by the intracellular demethylation of methionine. Total homocysteine (tHcy) represents the sum of all forms of Hcy including forms of oxidized, proteinbound and free. Elevated levels of tHcy has emerged as an important risk factor in the assessment of cardiovascular disease. Excess Hcy in the blood stream may cause injuries to arterial vessels due to its irritant nature, and result in inflammation and plaque formation, which may eventually cause blockage of blood flow to the heart. Elevated tHcy levels are caused by four major factors, including:

1. Genetic deficiencies in enzymes involved in Hcy metabolism such as cystathionine beta-synthase (CBS), methionine synthase (MS), and methylenetetrahydrofolate reductase (MTHFR);
2. Nutritional deficiency in B vitamins such as B6, B12 and folate;
3. Renal failure for effective amino acid clearance;
4. Drug interactions, such as with nitric oxide, methotrexate and phenytoin that interfere with Hcy metabolism. Elevated levels of tHcy are also linked with Alzheimer disease, Neuropsychiatric diseases and Osteoporosis.

Comments:

*** END OF REPORT ***

+91-11-49575700
+91-8130415737
lifelinelab@lifelinelaboratory.com
www.lifelinelaboratory.com
H-11, Green Park Extension,
New Delhi - 110 016

Consultant Pathologist / Microbiologist