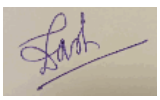
**DIAGNOSTICS REPORT**

| | | | |
|---|---|---|---|
| Patient Name | : Mr. VIVEK JAIN | Order Date | : 10/12/2022 10:35 |
| Age/Sex | : 39 Year(s)/Male | Report Date | : 10/12/2022 10:59 |
| UHID | : SHHM.54282 | IP No | : |
| Ref. Doctor | : Self | Facility | : SEVENHILLS HOSPITAL, MUMBAI |

## 2D ECHOCARDIOGRAPHY WITH COLOUR DOPPLER STUDY

Normal LV and RV systolic function.
Estimated LVEF = 60%
No LV regional wall motion abnormality at rest .
AII valves are structurally and functionally normal.
Normal sized cardiac chambers.
No LV Diastolic dysfunction .
No pulmonary arterial hypertension.
No regurgitation across any other valves.
Normal forward flow velocities across all the cardiac valves.
Aorta and pulmonary artery dimensions: normal.
IAS / IVS: Intact.
No evidence of clot, vegetation, calcification, pericardial effusion.
COLOUR DOPPLER: NO MR/AR.



**Dr.Jayashree Dash ,**

(Junior Consultant NIC)

RegNo: 3393/09/2003

# LABORATORY INVESTIGATION REPORT

| | | | |
|---|---|---|---|
| **Patient Name** | : Mr. VIVEK JAIN | **Age/Sex** | : 39 Year(s) / Male |
| **UHID** | : SHHM.54282 | **Order Date** | : 10/12/2022 10:35 |
| **Episode** | : OP | | |
| **Ref. Doctor** | : | **Mobile No** | : 9674930694 |
| | | **DOB** | : 24/07/1983 |
| | | **Facility** | : SEVENHILLS HOSPITAL, MUMBAI |

## Blood Bank

| Test Name | Result |
|---|---|

Sample No : O0252071A Collection Date : 10/12/22 10:45 Ack Date : 10/12/2022 11:51 Report Date : 10/12/22 13:04

**BLOOD GROUPING (ABO+RH) BY COLUMN AGGLUTINATION METHOD**

| | |
|---|---|
| BLOOD GROUP (ABO) | ' A ' |
| Rh Type | POSITIVE |

**REMARK :- The reported results pertain to the sample re**

*Interpretation :*
*Blood typing is used to determine an individual's blood group, to establish whether a person is blood group A, B, AB, or O and whether he or she is Rh positive or Rh negative. Blood typing has the following significance,*
*• Ensure compatibility between the blood type of a person who requires a transfusion of blood or blood components and the ABO and Rh type of the unit of blood that will be transfused.*
*• Determine compatibility between a pregnant woman and her developing baby (fetus). Rh typing is especially important during pregnancy because a mother and her fetus could be incompatible.*
*• Determine the blood group of potential blood donors at a collection facility.*
*• Determine the blood group of potential donors and recipients of organs, tissues, or bone marrow, as part of a workup for a transplant procedure.*

End of Report

**Dr.Ritesh Kharche**
**MD, PGD**
HOD, Laboratory Medicine Dept.

RegNo: 2006/03/1680

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# LABORATORY INVESTIGATION REPORT

| | | | |
|---|---|---|---|
| **Patient Name** | : Mr. VIVEK JAIN | **Age/Sex** | : 39 Year(s) / Male |
| **UHID** | : SHHM.54282 | **Order Date** | : 10/12/2022 10:35 |
| **Episode** | : OP | | |
| **Ref. Doctor** | : | **Mobile No** | : 9674930694 |
| | | **DOB** | : 24/07/1983 |
| | | **Facility** | : SEVENHILLS HOSPITAL, MUMBAI |

## HAEMATOLOGY

Sample No : O0252071A | Collection Date : 10/12/22 10:45 | Ack Date : 10/12/2022 11:06 | Report Date : 10/12/22 11:17

### COMPLETE BLOOD COUNT (CBC) - EDTA WHOLE BLOOD

| Test Name | Result | Unit | Ref. Range |
|---|---|---|---|
| Total WBC Count | 8.55 | x10^3/ul | 4.00 - 10.00 |
| Neutrophils | 62.4 | % | 40.00 - 80.00 |
| Lymphocytes | 27.6 | % | 20.00 - 40.00 |
| Eosinophils | 3.8 | % | 1.00 - 6.00 |
| Monocytes | 6.0 | % | 2.00 - 10.00 |
| Basophils | **0.2 ▼** | % | 1.00 - 2.00 |
| Absolute Neutrophils Count | 5.33 | x10^3/ul | 2.00 - 7.00 |
| Absolute Lymphocytes Count | 2.36 | x10^3/ul | 0.80 - 4.00 |
| Absolute Eosinophils Count | 0.32 | x10^3/ul | 0.02 - 0.50 |
| Absolute Monocytes Count | 0.52 | x10^3/ul | 0.12 - 1.20 |
| Absolute Basophils Count | 0.02 | x10^3/ul | 0.00 - 0.10 |
| RBCs | 5.16 | x10^6/ul | 4.50 - 5.50 |
| Haemoglobin | 15.0 | gm/dl | 13.00 - 17.00 |
| Hematocrit | 44.3 | % | 40.00 - 50.00 |
| MCV | 85.9 | fl | 83.00 - 101.00 |
| MCH | 29.1 | pg | 27.00 - 32.00 |
| MCHC | 33.9 | gm/dl | 31.50 - 34.50 |

## LABORATORY INVESTIGATION REPORT

| | | | |
|---|---|---|---|
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| | | | |
|---|---|---|---|
| RED CELL DISTRIBUTION WIDTH-CV (RDW-CV) | 12.6 | % | 11.00 - 16.00 |
| RED CELL DISTRIBUTION WIDTH-SD (RDW-SD) | 40.5 | fl | 35.00 - 56.00 |
| Platelet | 292 | x10^3/ul | 150.00 - 410.00 |
| MPV | 10.5 | fl | 6.78 - 13.46 |
| PLATELET DISTRIBUTION WIDTH (PDW) | 15.8 | % | 9.00 - 17.00 |
| PLATELETCRIT (PCT) | **0.306 ▲** | % | 0.11 - 0.28 |

*NOTE: Wallach's Interpretation of Diagnostic Tests. 11th Ed, Editors: Rao LV. 2021*

*NOTE :-*
*The International Council for Standardization in Haematology (ICSH) recommends reporting of absolute counts of various WBC subsets for clinical decision making.This test has been performed on a fully automated 5 part differential cell counter which counts over 10,000 WBCs to derive differential counts. A complete blood count is a blood panel that gives information about the cells in a patient's blood, such as the cell count for each cell type and the concentrations of Hemoglobin and platelets. The cells that circulate in the bloodstream are generally divided into three types: white blood cells (leukocytes), red blood cells (erythrocytes), and platelets (thrombocytes). Abnormally high or low counts may be physiological or may indicate disease conditions, and hence need to be interpreted clinically.*

**ERYTHROCYTE SEDIMENTATION RATE (ESR)**

| | | | |
|---|---|---|---|
| ESR | **35 ▲** | mm/hr | 0 - 20 |

*Method: Westergren Method*

*INTERPRETATION :-*
*ESR is a non-specific phenomenon, its measurement is clinically useful in disorders associated with an increased production of acute-phase proteins. it provides an index of progress of the disease in rheumatoid arthritis or tuberculosis, and it is of considerable value in diagnosis of temporal arteritis and polymyalgia rheumatica. It is often used if multiple myeloma is suspected, but when the myeloma is non-secretory or light chain, a normal ESR does not exclude this diagnosis.*

*An elevated ESR occurs as an early feature in myocardial infarction. Although a normal ESR cannot be taken to exclude the presence of organic disease, the vast majority of acute or chronic infections and most neoplastic and degenerative diseases are associated with changes in the plasma proteins that increased ES values. An increased ESR in subjects who are HIV seropositive seems to be an early predictive marker of progression toward acquired immune deficiency syndrome (AIDS).*

*The ESR is influenced by age, stage of the menstrual cycle and medications taken (corticosteroids, contraceptive pills). It is especially low (0–1 mm) in polycythaemia, hypofibrinogenaemia and congestive cardiac failure and when there are abnormalities of the red cells such as poikilocytosis, spherocytosis, or sickle cells. In cases of performance enhancing drug intake by athletes the ESR values are generally lower than the usual value for the individual and as a result of the increase in haemoglobin (i.e. the effect of secondary polycythaemia).*

## LABORATORY INVESTIGATION REPORT

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| **Episode** | : OP | | |
| **Ref. Doctor** | : | **Mobile No** | : 9674930694 |
| | | **DOB** | : 24/07/1983 |
| | | **Facility** | : SEVENHILLS HOSPITAL, MUMBAI |

End of Report

**Dr.Ritesh Kharche**
**MD, PGD**
HOD, Laboratory Medicine Dept.

RegNo: 2006/03/1680

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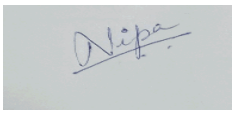

**Dr.Nipa Dhorda**
**MD**
Pathologist

# LABORATORY INVESTIGATION REPORT

| | | | |
|---|---|---|---|
| **Patient Name** | : Mr. VIVEK JAIN | **Age/Sex** | : 39 Year(s) / Male |
| **UHID** | : SHHM.54282 | **Order Date** | : 10/12/2022 10:35 |
| **Episode** | : OP | | |
| **Ref. Doctor** | : | **Mobile No** | : 9674930694 |
| | | **DOB** | : 24/07/1983 |
| | | **Facility** | : SEVENHILLS HOSPITAL, MUMBAI |

## Stool Examination

| Test Name | Result |
|---|---|

Sample No : O0252071D Collection Date : 10/12/22 10:45 Ack Date : 10/12/2022 11:07 Report Date : 10/12/22 14:40

**Gross and Chemical Examination**

| | |
|---|---|
| Consistency | Semi-Solid |
| COLOUR STOOL | Brown |
| Visible Blood | Absent |
| Mucus | Absent |
| Occult Blood | NEGATIVE |

**Microscopic Examination**

| | |
|---|---|
| Puscells | OCCASIONAL |
| RBC | ABSENT |
| Epithelial Cells | ABSENT |
| Parasites | Not Seen |
| Bacteria | Absent |

End of Report

**Dr.Ritesh Kharche**
**MD, PGD**
HOD, Laboratory Medicine Dept.
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# LABORATORY INVESTIGATION REPORT

| | | | |
|---|---|---|---|
| **Patient Name** | : Mr. VIVEK JAIN | **Age/Sex** | : 39 Year(s) / Male |
| **UHID** | : SHHM.54282 | **Order Date** | : 10/12/2022 10:35 |
| **Episode** | : OP | | |
| **Ref. Doctor** | : | **Mobile No** | : 9674930694 |
| | | **DOB** | : 24/07/1983 |
| | | **Facility** | : SEVENHILLS HOSPITAL, MUMBAI |

## Biochemistry

| Test Name | Result | Unit | Ref. Range |
|---|---|---|---|

Sample No : O0252071A | Collection Date : 10/12/22 10:45 | Ack Date : 10/12/2022 11:06 | Report Date : 10/12/22 11:59

### GLYCOSLYATED HAEMOGLOBIN (HBA1C)

| | | | |
|---|---|---|---|
| HbA1c<br>*Method - BIOCHEMISTRY* | 5.9 | % | 4 to 6% Non-diabetic<br>6.0--7.0% Excellent control<br>7.0--8.0% Fair to good control<br>8.0--10% Unsatisfactory control<br>ABOVE 10% Poor control |
| Estimated Average Glucose (eAG)<br>*Method - Calculated* | 122.63 | mg/dl | 90 - 126 |

*NOTES :-*
*1. HbA1c is used for monitoring diabetic control. It reflects the mean plasma glucose over three months*
*2. HbA1c may be falsely low in diabetics with hemolytic disease. In these individuals a plasma fructosamine level may be used which evaluates diabetes over 15 days.*
*3. Inappropriately low HbA1c values may be reported due to hemolysis, recent blood transfusion, acute blood loss, hypertriglyceridemia, chronic liver disease.Drugs like dapsone, ribavirin, antiretroviral drugs, trimethoprim, may also cause interference with estimation of HbA1c, causing falsely low values.*
*4. HbA1c may be increased in patients with polycythemia or post-splenectomy.*
*5. Inappropriately higher values of HbA1c may be caused due to iron deficiency, vitamin B12 deficiency, alcohol intake, uremia, hyperbilirubinemia and large doses of aspirin.*
*6. Trends in HbA1c are a better indicator of diabetic control than a solitary test.*
*7. Any sample with >15% HbA1c should be suspected of having a hemoglobin variant, especially in a non-diabetic patient. Similarly, below 4% should prompt additional studies to determine the possible presence of variant hemoglobin.*
*8. HbA1c target in pregnancy is to attain level <6 % .*
*9. HbA1c target in paediatric age group is to attain level < 7.5 %.*
*Method : turbidimetric inhibition immunoassay (TINIA) for hemolyzed whole blood*
*Reference : American Diabetes Associations. Standards of Medical Care in Diabetes 2015*

Sample No : O0252071B | Collection Date : 10/12/22 10:45 | Ack Date : 10/12/2022 11:31 | Report Date : 10/12/22 11:59

### GLUCOSE-PLASMA-FASTING

| | | | |
|---|---|---|---|
| Glucose,Fasting | 94.7 | mg/dl | 70 - 110 |

## LABORATORY INVESTIGATION REPORT

| | | | |
|---|---|---|---|
| **Patient Name** | : Mr. VIVEK JAIN | **Age/Sex** | : 39 Year(s) / Male |
| **UHID** | : SHHM.54282 | **Order Date** | : 10/12/2022 10:35 |
| **Episode** | : OP | | |
| **Ref. Doctor** | : | **Mobile No** | : 9674930694 |
| | | **DOB** | : 24/07/1983 |
| | | **Facility** | : SEVENHILLS HOSPITAL, MUMBAI |

*American Diabetes Association Reference Range :*

*Normal : < 100 mg/dl*
*Impaired fasting glucose(Prediabetes) : 100 - 126 mg/dl*
*Diabetes : >= 126 mg/dl*

*References:*
*1)Pack Insert of Bio system*
*2) Tietz Textbook Of Clinical Chemistry And Molecular Diagnostics, 6th Ed, Editors: Rifai et al. 2018*

*Interpretation :-*
*Conditions that can result in an elevated blood glucose level include: Acromegaly, Acute stress (response to trauma, heart attack,and stroke for instance), Chronic kidney disease, Cushing syndrome, Excessive consumption of food, Hyperthyroidism,Pancreatitis.*
*A low level of glucose may indicate hypoglycemia, a condition characterized by a drop in blood glucose to a level where first it causes nervous system symptoms (sweating, palpitations, hunger, trembling, and anxiety), then begins to affect the brain (causing confusion, hallucinations, blurred vision, and sometimes even coma and death). A low blood glucose level (hypoglycemia) may be seen with:Adrenal insufficiency, Drinking excessive alcohol, Severe liver disease, Hypopituitarism, Hypothyroidism, Severe infections, Severe heart failure, Chronic kidney (renal) failure, Insulin overdose, Tumors that produce insulin (insulinomas),Starvation.*

Sample No : O0252071C Collection Date : 10/12/22 10:45 Ack Date : 10/12/2022 11:31 Report Date : 10/12/22 12:09

**Lipid Profile**

| | | | |
|---|---|---|---|
| Total Cholesterol | 208.5 | mg/dl | Reference Values :<br>Up to 200 mg/dL - Desirable<br>200-239 mg/dL - Borderline HIgh<br>>240 mg/dL - High |
| Triglycerides<br>*Method - Enzymatic* | 146.4 | mg/dl | Reference Values:<br>Up to 150 mg/dL - Normal<br>150-199 mg/dL - Borderline High<br>200-499 mg/dL - High<br>>500 mg/dL - Very High |
| HDL Cholesterol<br>*Method - Enzymatic immuno inhibition* | 37.2 | mg/dl | 0 - 60 |
| LDL Cholesterol<br>*Method - Calculated* | **142.02 ▲** | mg/dl | 0 - 130 |
| VLDL Cholesterol<br>*Method - Calculated* | 29.28 | mg/dl | 0 - 40 |
| Total Cholesterol / HDL Cholesterol Ratio - Calculated<br>*Method - Calculated* | **5.60 ▲** | RATIO | 0 - 5 |

## LABORATORY INVESTIGATION REPORT

| | | | |
|---|---|---|---|
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| **Episode** | : OP | | |
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| | | **DOB** | : 24/07/1983 |
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| | | | |
|---|---|---|---|
| LDL / HDL Cholesterol Ratio - Calculated<br>*Method - Calculated* | 3.82 | RATIO | 0 - 4.3 |

*References:*
*1)Pack Insert of Bio system*
*2) Tietz Textbook Of Clinical Chemistry And Molecular Diagnostics, 6th Ed, Editors: Rifai et al. 2018*

*Interpretation*
*1.Triglycerides: When triglycerides are very high greater than 1000 mg/dL, there is a risk of developing pancreatitis in children and adults. Triglycerides change dramatically in response to meals, increasing as much as 5 to 10 times higher than fasting levels just a few hours after eating. Even fasting levels vary considerably day to day. Therefore, modest changes in fasting triglycerides measured on different days are not considered to be abnormal.*
*2. HDL-Cholesterol: HDL- C is considered to be beneficial, the so-called "good" cholesterol, because it removes excess cholesterol from tissues and carries it to the liver for disposal. If HDL-C is less than 40 mg/dL for men and less than 50 mg/dL for women, there is an increased risk of heart disease that is independent of other risk factors, including the LDL-C level. The NCEP guidelines suggest that an HDL cholesterol value greater than 60 mg/dL is protective and should be treated as a negative risk factor.*
*3. LDL-Cholesterol: Desired goals for LDL-C levels change based on individual risk factors. For young adults, less than 120 mg/dL is acceptable. Values between 120-159 mg/dL are considered Borderline high. Values greater than 160 mg/dL are considered high. Low levels of LDL cholesterol may be seen in people with an inherited lipoprotein deficiency and in people with hyperthyroidism, infection, inflammation, or cirrhosis.*

**Uric Acid (Serum)**

| | | | |
|---|---|---|---|
| Uric Acid<br>*Method - Uricase* | **8.0 ▲** | mg/dl | 3.5 - 7.2 |

*References:*
*1)Pack Insert of Bio system*
*2) TIETZ Textbook of Clinical chemistry and Molecular DiagnosticsEdited by: Carl A.burtis,Edward R. Ashwood,David e. Bruns*

*Interpretation:-*
*Uric acid is produced by the breakdown of purines. Purines are nitrogen-containing compounds found in the cells of the body, including our DNA. Increased concentrations of uric acid can cause crystals to form in the joints, which can lead to the joint inflammation and pain characteristic of gout. Low values can be associated with some kinds of liver or kidney diseases, Fanconi syndrome, exposure to toxic compounds, and rarely as the result of an inherited metabolic defect (Wilson disease).*

**Liver Function Test ( LFT )**

| | | | |
|---|---|---|---|
| SGOT (Aspartate Transaminase) - SERUM<br>*Method - IFCC* | **54.84 ▲** | U/L | 0 - 35 |
| SGPT (Alanine Transaminase) - SERUM<br>*Method - IFCC* | **75.8 ▲** | U/L | 0 - 45 |
| Total Bilirubin - SERUM<br>*Method - Diazo* | 0.7 | mg/dl | 0 - 2 |
| Direct Bilirubin - - SERUM<br>*Method - Diazotization* | 0.29 | mg/dl | 0 - 0.4 |
| Indirect Bilirubin - Calculated<br>*Method - Calculated* | 0.41 | mg/dl | 0.1 - 0.8 |

## LABORATORY INVESTIGATION REPORT

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| **UHID** | : SHHM.54282 | **Order Date** | : 10/12/2022 10:35 |
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| | | | |
|---|---|---|---|
| Alkaline Phosphatase - SERUM<br>*Method - IFCC AMP Buffer* | **121.07 ▲** | U/L | 0 - 115 |
| Total Protein - SERUM<br>*Method - Biuret* | **7.93 ▲** | gm/dl | 6 - 7.8 |
| Albumin - SERUM<br>*Method - Bromo Cresol Green(BCG)* | 4.46 | gm/dl | 3.5 - 5.2 |
| Globulin - Calculated<br>*Method - Calculated* | 3.47 | gm/dl | 2 - 4 |
| A:G Ratio<br>*Method - Calculated* | 1.29 | :1 | 1 - 3 |
| Gamma Glutamyl Transferase (GGT) - Gglutamyl carboxy nitroa<br>*Method - G glutamyl carboxy nitroanilide* | **62.92 ▲** | U/L | 0 - 55 |

*References:*
*1)Pack Insert of Bio system*
*2) Tietz Textbook Of Clinical Chemistry And Molecular Diagnostics, 6th Ed, Editors: Rifai et al. 2018*

*Interperatation :-*
*Bilirubin is a yellowish pigment found in bile and is a breakdown product of normal heme catabolism. Elevated levels results from increased bilirubin production (eg hemolysis and ineffective erythropoiesis); decreased bilirubin excretion (eg; obstruction and hepatitis); and abnormal bilirubin metabolism (eg; hereditary and neonatal jaundice).conjugated (direct) bilirubin is also elevated more than unconjugated (indirect) bilirubin when there is some kind of blockage of the bile ducts like in Gallstonesgetting into the bile ducts tumors & Scarring of the bile ducts. Increased unconjugated (indirect) bilirubin may be a result of hemolytic or pernicious anemia, transfusion reaction & a common metabolic condition termed Gilbert syndrome.*
*AST levels increase in viral hepatitis, blockage of the bile duct ,cirrhosis of the liver, liver cancer, kidney failure, hemolytic anemia, pancreatitis, hemochromatosis.Ast levels may also increase after a heart attck or strenuous activity. ALT is commonly measured as a part of a diagnostic evaluation of hepatocellular injury, to determine liver health. Elevated ALP levels are seen in Biliary Obstruction, Osteoblastic Bone Tumors, Osteomalacia, Hepatitis, Hyperparathyriodism, Leukemia,Lymphoma, paget`s disease, Rickets, Sarcoidosis etc.*
*Elevated serum GGT activity can be found in diseases of the liver, Biliary system and pancreas. Conditions that increase serum GGT are obstructive liver disease,high alcohol consumption and use of enzyme-including drugs etc.*
*Serum total protein, also known as total protein, is a biochemical test for measuring the total amount of protein in serum..Protein in the plasma is made up of albumin and globulin. Higher-than-normal levels may be due to: Chronic inflammation or infection, including HIV and hepatitis B or C, Multiple myeloma,Waldenstrom's disease. Lower-than-normal levels may be due to: Agammaglobulinemia, Bleeding (hemorrhage), Burns, Glomerulonephritis, Liver disease, Malabsorption, Malnutrition, Nephrotic - Human serum albumin is the most abundant protein in human blood plasma. It is produced in the liver.Albumin constitutes about half of the blood serum protein. Low blood albumin levels (hypoalbuminemia) can be caused by: Liver disease like cirrhosis of the liver, nephrotic syndrome, protein-losing enteropathy, Burns, hemodilution, increased vascular permeability or decreased lymphatic clearance, malnutrition and wasting etc.*

**Renal Function Test ( RFT )**

| | | | |
|---|---|---|---|
| Urea - SERUM<br>*Method - Urease* | 19.6 | mg/dl | 15 - 39 |
| BUN - SERUM<br>*Method - Urease-GLDH* | 9.16 | mg/dl | 4 - 18 |
| Creatinine - SERUM<br>*Method - Jaffes Kinetic* | 0.95 | mg/dl | 0.5 - 1.3 |

## LABORATORY INVESTIGATION REPORT

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| | | **DOB** | : 24/07/1983 |
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*References:*
*1)Pack Insert of Bio system*
*2) Tietz Textbook Of Clinical Chemistry And Molecular Diagnostics, 6th Ed, Editors: Rifai et al. 2018*

*Interpretation:-*
*The blood urea nitrogen or BUN test is primarily used, along with the creatinine test, to evaluate kidney function in a wide range of circumstances, to help diagnose kidney disease, and to monitor people with acute or chronic kidney dysfunction or failure. It also may be used to evaluate a person's general health status.*

Sample No : O0252090B Collection Date : 10/12/22 11:40 Ack Date : 10/12/2022 12:12 Report Date : 10/12/22 12:40

### GLUCOSE-PLASMA POST PRANDIAL

| | | | |
|---|---|---|---|
| Glucose,Post Prandial | 119.9 | mg/dl | 70.00 - 140.00 |

*American Diabetes Association Reference Range :*

*Post-Prandial Blood Glucose:*
*Non- Diabetic: Up to 140mg/dL*
*Pre-Diabetic: 140-199 mg/dL*
*Diabetic :>200 mg/dL*

*References:*
*1)Pack Insert of Bio system*
*2) Tietz Textbook Of Clinical Chemistry And Molecular Diagnostics, 6th Ed, Editors: Rifai et al. 2018*

*Interpretation :-*
*Conditions that can result in an elevated blood glucose level include: Acromegaly, Acute stress (response to trauma, heart attack,and stroke for instance), Chronic kidney disease, Cushing syndrome, Excessive consumption of food, Hyperthyroidism,Pancreatitis.*
*A low level of glucose may indicate hypoglycemia, a condition characterized by a drop in blood glucose to a level where first it causes nervous system symptoms (sweating, palpitations, hunger, trembling, and anxiety), then begins to affect the brain (causing confusion, hallucinations, blurred vision, and sometimes even coma and death). A low blood glucose level (hypoglycemia) may be seen with:Adrenal insufficiency, Drinking excessive alcohol, Severe liver disease, Hypopituitarism, Hypothyroidism, Severe infections, Severe heart failure, Chronic kidney (renal) failure, Insulin overdose, Tumors that produce insulin (insulinomas),Starvation.*

End of Report

**Dr.Ritesh Kharche**
**MD, PGD**
HOD, Laboratory Medicine Dept.

RegNo: 2006/03/1680

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# LABORATORY INVESTIGATION REPORT

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| | | **Facility** | : SEVENHILLS HOSPITAL, MUMBAI |

## IMMUNOLOGY

Sample No : O0252071C Collection Date : 10/12/22 10:45 Ack Date : 10/12/2022 11:31 Report Date : 10/12/22 14:41

| Test Name | Result | Unit | Ref. Range |
|---|---|---|---|
| T3 - SERUM<br>*Method - CLIA* | 122 | ng/dl | 70.00 - 204.00 |
| T4 - SERUM<br>*Method - CLIA* | 7.22 | ug/dL | 4.60 - 10.50 |
| TSH - SERUM<br>*Method - CLIA* | 4.41 | uIU/ml | 0.40 - 4.50 |

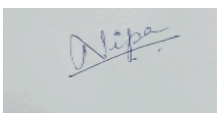
*Reference Ranges (T3) Pregnancy:*
*First Trimester 81 - 190*
*Second Trimester & Third Trimester 100 - 260*

*Reference Ranges (TSH) Pregnancy:*
*1st Trimester : 0.1 – 2.5*
*2nd Trimester : 0.2 – 3.0*
*3rd Trimester : 0.3 – 3.0*

*Reference:*
*1.Clinical Chemistry and Molecular Diagnostics, Tietz Fundamentals, 7th Edition & Endocronology Guideliens*

*Interpretation :-*
*It is recommended that the following potential sources of variation should be considered while interpreting thyroid hormone results:*
*1. Thyroid hormones undergo rhythmic variation within the body this is called circadian variation in TSH secretion: Peak levels are seen between 2-4 am. Minimum levels seen between 6-10 am. This variation may be as much as 50% thus, influence of sampling time needs to be considered for clinical interpretation.*
*2. Circulating forms of T3 and T4 are mostly reversibly bound with Thyroxine binding globulins (TBG), and to a lesser extent with albumin and Thyroid binding PreAlbumin. Thus the conditions in which TBG and protein levels alter such as chronic liver disorders, pregnancy, excess of estrogens, androgens, anabolic steroids and glucocorticoids may cause misleading total T3, total T4 and TSH interpretations.*
*3. Total T3 and T4 levels are seen to have physiological rise during pregnancy and in patients on steroid treatment.*
*4. T4 may be normal the presence of hyperthyroidism under the following conditions : T3 thyrotoxicosis, Hypoproteinemia related reduced binding, during intake of certain drugs (eg Phenytoin, Salicylates etc)*
*5. Neonates and infants have higher levels of T4 due to increased concentration of TBG*
*6. TSH levels may be normal in central hypothyroidism, recent rapid correction of hypothyroidism or hyperthyroidism, pregnancy, phenytoin therapy etc.*
*7. TSH values of <0.03 uIU/mL must be clinically correlated to evaluate the presence of a rare TSH variant in certain individuals which is undetectable by conventional methods.*
*8. Presence of Autoimmune disorders may lead to spurious results of thyroid hormones*
*9. Various drugs can lead to interference in test results.*
*10. It is recommended that evaluation of unbound fractions, that is free T3 (fT3) and free T4 (fT4) for clinic-pathologic correlation, as these are the metabolically active forms.*

End of Report



## LABORATORY INVESTIGATION REPORT

| | | | |
|---|---|---|---|
| **Patient Name** | : Mr. VIVEK JAIN | **Age/Sex** | : 39 Year(s) / Male |
| **UHID** | : SHHM.54282 | **Order Date** | : 10/12/2022 10:35 |
| **Episode** | : OP | | |
| **Ref. Doctor** | : | **Mobile No** | : 9674930694 |
| | | **DOB** | : 24/07/1983 |
| | | **Facility** | : SEVENHILLS HOSPITAL, MUMBAI |

**Dr.Nipa Dhorda**
**MD**
Pathologist

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# DIAGNOSTICS REPORT

| | | | |
|---|---|---|---|
| Patient Name | : Mr. VIVEK JAIN | Order Date | : 10/12/2022 10:35 |
| Age/Sex | : 39 Year(s)/Male | Report Date | : 10/12/2022 17:13 |
| UHID | : SHHM.54282 | IP No | : |
| Ref. Doctor | : Self | Facility | : SEVENHILLS HOSPITAL, MUMBAI |

**USG ABDOMEN**

**Liver is enlarged in size ( 16.4 cm) and shows bright echotexture**. No focal liver parenchymal lesion is seen. Intrahepatic portal and biliary radicles are normal.

Gall-bladder is physiologically distended. No evidence of intraluminal calculus is seen. Wall thickness appears normal. No evidence of peri-cholecystic fluid is seen.

Portal vein and CBD are normal in course and calibre.

Visualised part of pancreas appears normal in size and echotexture. No evidence of duct dilatation or parenchymal calcification seen.

Spleen is normal in size ( 9 cm) and echotexture. No focal lesion is seen in the spleen.

Right kidney measures 10.9 x 4.5 cm.
Left kidney measures 10.1 x 5.6 cm.

Both the kidneys are normal in size, shape and echotexture. Cortico-medullary differentiation is maintained. No evidence of calculus or hydronephrosis on either side.

There is no free fluid in abdomen and pelvis.

**IMPRESSION:**

- **Mild hepatomegaly with grade I fatty changes.**

**Dr.Sagar Shriramlingam Garge ,**
**MBBS,DMRE**

RegNo: 2015/04/1936

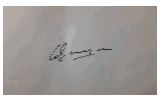
**DIAGNOSTICS REPORT**

| | | | |
|---|---|---|---|
| Patient Name | : Mr. VIVEK JAIN | Order Date | : 10/12/2022 10:35 |
| Age/Sex | : 39 Year(s)/Male | Report Date | : 10/12/2022 15:44 |
| UHID | : SHHM.54282 | IP No | : |
| Ref. Doctor | : Self | Facility | : SEVENHILLS HOSPITAL, MUMBAI |

## X-RAY CHEST PA VIEW

Both lungs are clear.
The frontal cardiac dimensions are normal.
The pleural spaces are clear.
Both hilar shadows are normal in position and density.
No diaphragmatic abnormality is seen.
The soft tissues and bony thorax are normal.

**IMPRESSION: No pleuroparenchymal lesion is seen.**



**Dr.Sagar Shriramlingam Garge ,**
**MBBS,DMRE**

RegNo: 2015/04/1936

# SEVEN HILLS HOSPITAL

MUMBAI

MUMBAI

**Mr. VIVEK JAIN**
ID : 46892
DATE : 10-12-2022
AGE/SEX : 39 /M
HT/WT : 175 / 93
REF.BY : Self

**TREADMILL TEST REPORT**

PROTOCOL : Bruce
HISTORY : HTN
INDICATION : Routine
MEDICATION : CIPLAR LA-20mg

| PHASE | TOTAL TIME | STAGE TIME | SPEED Km/Hr | GRADE % | H.R. bpm | B.P. mmHg | RPP x100 | ST LEVEL(MM) II | ST LEVEL(MM) V1 | ST LEVEL(MM) V5 | METS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SUPINE | | | | | 90 | 136 / 82 | 122 | 1.6 | -0.1 | 1.8 | |
| STANDING | | | | | 87 | 136 / 82 | 118 | 1.7 | -0.1 | 2 | |
| HYPERVENT | | 0:31 | | | 93 | 136 / 82 | 126 | 1.4 | -0.1 | 2 | |
| Stage 1 | 2:55 | 2:55 | 2.7 | 10 | 117 | 136 / 82 | 159 | 1.3 | 0.1 | 2.2 | 4.67 |
| Stage 2 | 5:55 | 2:55 | 4 | 12 | 137 | 140 / 90 | 191 | 0.6 | 0.4 | 2 | 7.04 |
| PK-EXERCISE | 6:49 | 0:49 | 5.4 | 14 | 156 | 150 / 90 | 234 | 0.2 | 0.3 | 1 | 7.89 |
| RECOVERY | 9:52 | 2:48 | | | 98 | 150 / 90 | 147 | 0.5 | -0.2 | 1 | |
| RECOVERY | 9:59 | 2:55 | | | 94 | 150 / 90 | 141 | 0.5 | -0.2 | 1.1 | |

## RESULTS

EXERCISE DURATION : 6:49
MAX WORK LOAD : 7.89 METS
MAX HEART RATE : 156 bpm 86 % of target heart rate 181 bpm
MAX BLOOD PRESSURE : 150 / 90 mm Hg
REASON OF TERMINATION : THR ACHIEVED

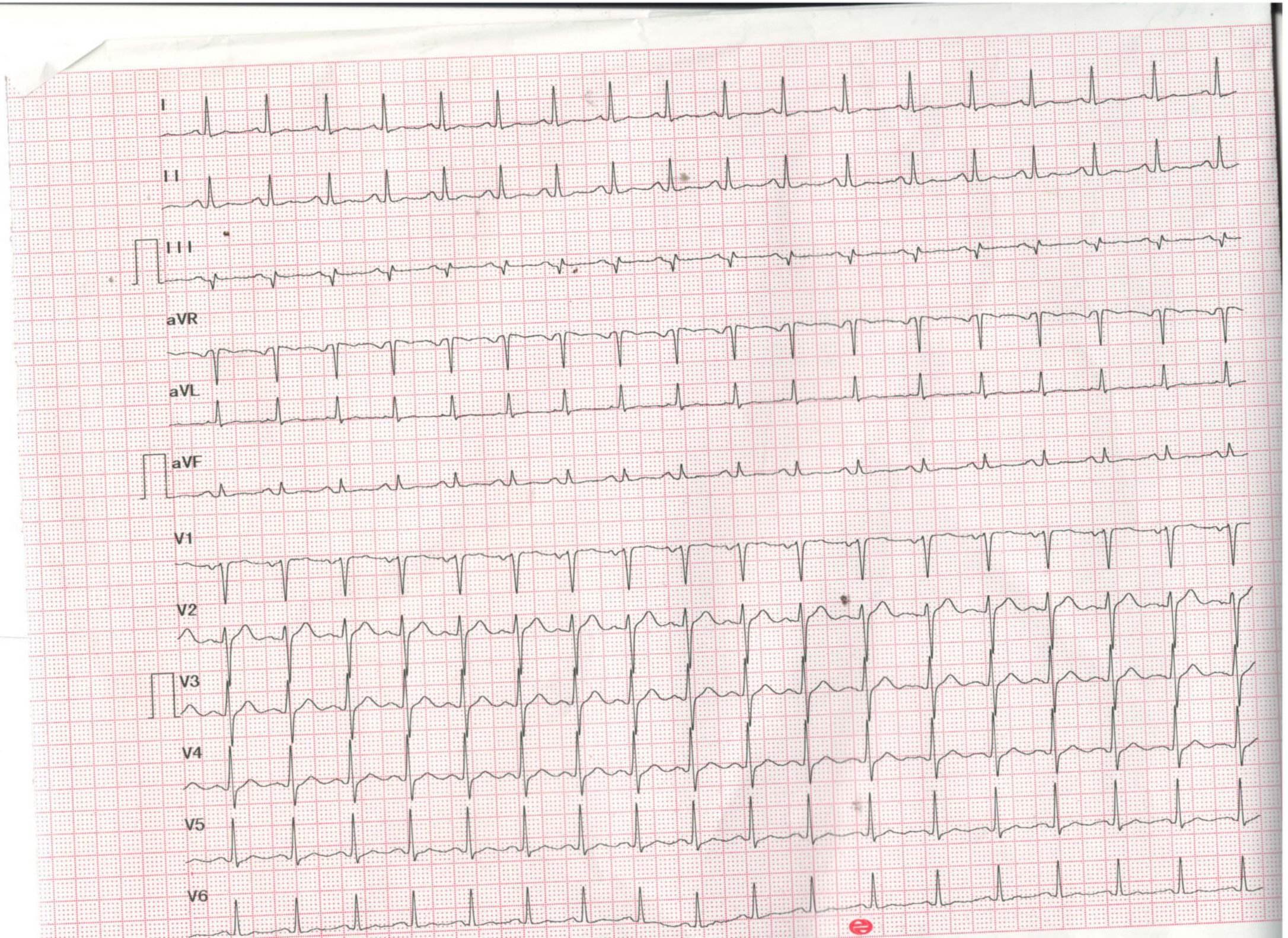
BP RESPONSE :
ARRYTHMIA :
H.R. RESPONSE :

## IMPRESSIONS :

**GOOD EFFORT TOLERANCE.**
**NORMAL CHRONOTROPIC AND IONOTROPIC RESPONSES.**
**NO ANGINA / ARRHYTHMIA.**
**NO ST - T CHANGES.**
**STRESS TEST IS NEGATIVE FOR INDUCIBLE ISCHAEMIA.**

**Technician : VIKESH JADHAV**

**Dr. Jayshree Dash**


I
II
III
aVR
aVL
aVF
V1
V2
V3
V4
V5
V6

| | | | |
|---|---|---|---|
| ID | : 2212100012 | DataTime | : 2022-12-10 10:34 |
| Name | : vivek jain | Height | : cm |
| Sex | : Male | Weight | : kg |
| Age | : 39 | BP | : / mmHg |
| Divisions: | | Bed No. | : |
| Hospital No. : | | | |
| Hospital: seven hills hospital | | | |

| | | | |
|---|---|---|---|
| HR | 113bpm | RV5/SV1 amp | 1.031/0.878mV |
| P Dur/PR int | 130/158ms | RV5+SV1 amp | 1.909mV |
| QRS Dur | 89 ms | RV6/SV2 amp | 0.825/1.000mV |
| QT/QTC int | 315/433 ms | | |
| P/QRS/T axis | 59/30/74 ° | | |

| Minnesota Code | Diagnosis Info |
|---|---|
| 8-7-3 | 812 Sinus Tachycardia |
| 5-5-0(V5) | |
| 9-4-1(V3) | |

Sinus Tachycardia

Diagnosis for reference, ask your doctor to confirm