: Mrs. TAMILSELVI P Register On : 22/03/2023 9:18 AM

**Report On** : 22/03/2023 3:40 PM

Ref. Dr : MediWheel Type : OP

Name

PID No.

SID No.

: 623006926



| <u>Investigation</u>  | Observed Value | <u>Unit</u> | <b>Biological Reference Interval</b> |
|---|----------------|-------------|--------------------------------------|
| <b>IMMUNOHAEMATOLOGY</b>  |                |             |                                      |
| <b>BLOOD GROUPING AND Rh TYPING</b> (Blood /Agglutination)  | 'O' 'Negative' |             |                                      |
| <b>HAEMATOLOGY</b>  |                |             |                                      |
| Complete Blood Count With - ESR   |                |             |                                      |
| Haemoglobin (Blood/Spectrophotometry)   | 10.92          | g/dL        | 12.5 - 16.0                          |
| Packed Cell Volume(PCV)/Haematocrit (Blood/Derived from Impedance)  | 34.02          | %           | 37 - 47                              |
| RBC Count (Blood/Impedance Variation)   | 04.11          | mill/cu.mm  | 4.2 - 5.4                            |
| Mean Corpuscular Volume(MCV) (Blood/<br>Derived from Impedance)   | 82.76          | fL          | 78 - 100                             |
| Mean Corpuscular Haemoglobin(MCH) (Blood/Derived from Impedance)  | 26.57          | pg          | 27 - 32                              |
| Mean Corpuscular Haemoglobin concentration(MCHC) (Blood/Derived from Impedance)   | 32.10          | g/dL        | 32 - 36                              |
| RDW-CV(Derived from Impedance)  | 14.5           | %           | 11.5 - 16.0                          |
| RDW-SD(Derived from Impedance)  | 42.00          | fL          | 39 - 46                              |
| Total Leukocyte Count (TC) (Blood/<br>Impedance Variation)  | 7410           | cells/cu.mm | 4000 - 11000                         |
| <b>Neutrophils</b> (Blood/Impedance Variation & Flow Cytometry)   | 53.50          | %           | 40 - 75                              |
| <b>Lymphocytes</b> (Blood/Impedance Variation & Flow Cytometry)   | 38.60          | %           | 20 - 45                              |
| <b>Eosinophils</b> (Blood/Impedance Variation & Flow Cytometry)   | 04.00          | %           | 01 - 06                              |
| <b>Monocytes</b> (Blood/Impedance Variation & Flow Cytometry)   | 03.40          | %           | 01 - 10                              |
| <b>Basophils</b> (Blood/Impedance Variation & Flow Cytometry)   | 00.50          | %           | 00 - 02                              |
| <b>INTERPRETATION:</b> Tests done on Automated Five Part cell counter. All abnormal results are reviewed and confirmed microscopically. |                |             |                                      |
| Absolute Neutrophil count (Blood/<br>Impedance Variation & Flow Cytometry)  | 3.96           | 10^3 / μl   | 1.5 - 6.6                            |
| Absolute Lymphocyte Count (Blood/<br>Impedance Variation & Flow Cytometry)  | 2.86           | 10^3 / μl   | 1.5 - 3.5                            |
| Absolute Eosinophil Count (AEC) (Blood/<br>Impedance Variation & Flow Cytometry)  | 0.30           | 10^3 / µl   | 0.04 - 0.44                          |
| Absolute Monocyte Count (Blood/<br>Impedance Variation & Flow Cytometry)  | 0.25           | 10^3 / μl   | < 1.0                                |
|   |                |             |                                      |





: Mrs. TAMILSELVI P Register On : 22/03/2023 9:18 AM

Age / Sex : 39 Year(s) / Female Printed On : 01/04/2023 12:37 PM

Ref. Dr : MediWheel Type : OP



| <u>Investigation</u>   | Observed Value | <u>Unit</u> | <b>Biological Reference Interval</b>                         |
|--|----------------|-------------|--|
| Absolute Basophil count (Blood/Impedance Variation & Flow Cytometry) | 0.04           | 10^3 / µl   | < 0.2  |
| Platelet Count (Blood/Impedance Variation)                           | 312            | 10^3 / μl   | 150 - 450  |
| MPV (Blood/Derived from Impedance)                                   | 08.06          | fL          | 8.0 - 13.3   |
| PCT(Automated Blood cell Counter)                                    | 0.25           | %           | 0.18 - 0.28  |
| ESR (Erythrocyte Sedimentation Rate) (Blood/Automated ESR analyser)  | 42             | mm/hr       | < 20   |
| <b>BIOCHEMISTRY</b>  |                |             |  |
| BUN / Creatinine Ratio   | 12.5           |             |  |
| <b>Glucose Fasting (FBS)</b> (Plasma - F/GOD-PAP)                    | 72.8           | mg/dL       | Normal: < 100<br>Pre Diabetic: 100 - 125<br>Diabetic: >= 126 |

**INTERPRETATION:** Factors such as type, quantity and time of food intake, Physical activity, Psychological stress, and drugs can influence blood glucose level.

| Glucose, Fasting (Urine) (Urine - F)                  | Negative |       | Negative |
|---|----------|-------|----------|
| Glucose Postprandial (PPBS) (Plasma - PP/<br>GOD-PAP) | 89.6     | mg/dL | 70 - 140 |

#### **INTERPRETATION:**

Name

PID No.

SID No.

Factors such as type, quantity and time of food intake, Physical activity, Psychological stress, and drugs can influence blood glucose level. Fasting blood glucose level may be higher than Postprandial glucose, because of physiological surge in Postprandial Insulin secretion, Insulin resistance, Exercise or Stress, Dawn Phenomenon, Somogyi Phenomenon, Anti- diabetic medication during treatment for Diabetes.

| Urine Glucose(PP-2 hours) (Urine - PP)                         | Negative |       | Negative  |
|--|----------|-------|-----------|
| <b>Blood Urea Nitrogen (BUN)</b> (Serum/Urease UV / derived)   | 11.3     | mg/dL | 7.0 - 21  |
| Creatinine (Serum/Modified Jaffe)                              | 0.90     | mg/dL | 0.6 - 1.1 |
| Uric Acid (Serum/Enzymatic)                                    | 4.3      | mg/dL | 2.6 - 6.0 |
| Liver Function Test  |          |       |           |
| Bilirubin(Total) (Serum)                                       | 0.56     | mg/dL | 0.1 - 1.2 |
| <b>Bilirubin(Direct)</b> (Serum/Diazotized Sulfanilic Acid)    | 0.14     | mg/dL | 0.0 - 0.3 |
| Bilirubin(Indirect) (Serum/Derived)                            | 0.42     | mg/dL | 0.1 - 1.0 |
| SGOT/AST (Aspartate Aminotransferase)<br>(Serum/Modified IFCC) | 28.3     | U/L   | 5 - 40    |
| SGPT/ALT (Alanine Aminotransferase) (Serum)                    | 22.7     | U/L   | 5 - 41    |
| GGT(Gamma Glutamyl Transpeptidase)<br>(Serum/IFCC / Kinetic)   | 12.3     | U/L   | < 38      |
|  |          |       |           |





Name : Mrs. TAMILSELVI P Register On : 22/03/2023 9:18 AM

Ref. Dr : MediWheel Type : OP

PID No.

SID No.

Age / Sex



| <u>Investigation</u>                                 | Observed Value | <u>Unit</u> | Biological Reference Interval   |
|--|----------------|-------------|---|
| Alkaline Phosphatase (SAP) (Serum/<br>Modified IFCC) | 59.6           | U/L         | 42 - 98   |
| Total Protein (Serum/Biuret)                         | 7.22           | gm/dL       | 6.0 - 8.0   |
| Albumin (Serum/Bromocresol green)                    | 3.79           | gm/dL       | 3.5 - 5.2   |
| Globulin (Serum/Derived)                             | 3.43           | gm/dL       | 2.3 - 3.6   |
| A: GRATIO (Serum/Derived)                            | 1.10           |             | 1.1 - 2.2   |
| <u>Lipid Profile</u>                                 |                |             |   |
| Cholesterol Total (Serum/CHOD-PAP with ATCS)         | 174.2          | mg/dL       | Optimal: < 200<br>Borderline: 200 - 239<br>High Risk: >= 240                    |
| Triglycerides (Serum/GPO-PAP with ATCS)              | 76.2           | mg/dL       | Optimal: < 150<br>Borderline: 150 - 199<br>High: 200 - 499<br>Very High: >= 500 |

**INTERPRETATION:** The reference ranges are based on fasting condition. Triglyceride levels change drastically in response to food, increasing as much as 5 to 10 times the fasting levels, just a few hours after eating. Fasting triglyceride levels show considerable diurnal variation too. There is evidence recommending triglycerides estimation in non-fasting condition for evaluating the risk of heart disease and screening for metabolic syndrome, as non-fasting sample is more representative of the husual+dicirculating level of triglycerides during most part of the day.

| HDL Cholesterol (Serum/Immunoinhibition) | 42.9  | mg/dL | Optimal(Negative Risk Factor): >= 60<br>Borderline: 50 - 59<br>High Risk: < 50                                   |
|--|-------|-------|--|
| LDL Cholesterol (Serum/Calculated)       | 116.1 | mg/dL | Optimal: < 100<br>Above Optimal: 100 - 129<br>Borderline: 130 - 159<br>High: 160 - 189<br>Very High: >= 190      |
| VLDL Cholesterol (Serum/Calculated)      | 15.2  | mg/dL | < 30   |
| Non HDL Cholesterol (Serum/Calculated)   | 131.3 | mg/dL | Optimal: < 130<br>Above Optimal: 130 - 159<br>Borderline High: 160 - 189<br>High: 190 - 219<br>Very High: >= 220 |

**INTERPRETATION:** 1.Non-HDL Cholesterol is now proven to be a better cardiovascular risk marker than LDL Cholesterol. 2.lt is the sum of all potentially atherogenic proteins including LDL, IDL, VLDL and chylomicrons and it is the "new bad cholesterol" and is a co-primary target for cholesterol lowering therapy.





Name : Mrs. TAMILSELVI P Register On : 22/03/2023 9:18 AM

PID No. : MED121758976 Collection On : 22/03/2023 10:37 AM

SID No. : 623006926 Report On : 22/03/2023 3:40 PM

Ref. Dr : MediWheel Type : OP



| <u>Investigation</u>   | Observed Value | <u>Unit</u> | <b>Biological Reference Interval</b>   |
|--|----------------|-------------|--|
| Total Cholesterol/HDL Cholesterol Ratio (Serum/Calculated)     | 4.1            |             | Optimal: < 3.3<br>Low Risk: 3.4 - 4.4<br>Average Risk: 4.5 - 7.1<br>Moderate Risk: 7.2 - 11.0<br>High Risk: > 11.0 |
| Triglyceride/HDL Cholesterol Ratio (TG/HDL) (Serum/Calculated) | 1.8            |             | Optimal: < 2.5<br>Mild to moderate risk: 2.5 - 5.0<br>High Risk: > 5.0   |
| LDL/HDL Cholesterol Ratio (Serum/<br>Calculated)               | 2.7            |             | Optimal: 0.5 - 3.0<br>Borderline: 3.1 - 6.0<br>High Risk: > 6.0  |
| Glycosylated Haemoglobin (HbA1c)                               |                |             |  |
| <b>HbA1C</b> (Whole Blood/Ion exchange HPLC by D10)            | 5.8            | %           | Normal: 4.5 - 5.6<br>Prediabetes: 5.7 - 6.4<br>Diabetic: >= 6.5  |

INTERPRETATION: If Diabetes - Good control: 6.1 - 7.0 %, Fair control: 7.1 - 8.0 %, Poor control >= 8.1 %

Estimated Average Glucose (Whole Blood) 119.76 mg/dL

#### **INTERPRETATION: Comments**

HbA1c provides an index of Average Blood Glucose levels over the past 8 - 12 weeks and is a much better indicator of long term glycemic control as compared to blood and urinary glucose determinations.

Conditions that prolong RBC life span like Iron deficiency anemia, Vitamin B12 & Folate deficiency,

hypertriglyceridemia, hyperbilirubinemia, Drugs, Alcohol, Lead Poisoning, Asplenia can give falsely elevated HbA1C values.

Conditions that shorten RBC survival like acute or chronic blood loss, hemolytic anemia, Hemoglobinopathies,

Splenomegaly, Vitamin E ingestion, Pregnancy, End stage Renal disease can cause falsely low HbA1c.

## **IMMUNOASSAY**

#### THYROID PROFILE / TFT

**T3 (Triiodothyronine) - Total** (Serum/ 1.17 ng/ml 0.7 - 2.04

Chemiluminescent Immunometric Assay

(CLIA))

## INTERPRETATION:

#### Comment:

Total T3 variation can be seen in other condition like pregnancy, drugs, nephrosis etc. In such cases, Free T3 is recommended as it is Metabolically active.

**T4 (Tyroxine) - Total** (Serum/ 7.70 μg/dl 4.2 - 12.0

Chemiluminescent Immunometric Assay

(CLIA))

## INTERPRETATION:

#### Comment:

Total T4 variation can be seen in other condition like pregnancy, drugs, nephrosis etc. In such cases, Free T4 is recommended as it is Metabolically active.





: Mrs. TAMILSELVI P Register On : 22/03/2023 9:18 AM

Collection On : 22/03/2023 10:37 AM

**Report On** : 22/03/2023 3:40 PM

**Printed On** : 01/04/2023 12:37 PM

Type : OP



Investigation Observed Value Unit Biological Reference Interval

TSH (Thyroid Stimulating Hormone) (Serum 2.84 µIU/mL 0.35 - 5.50

/Chemiluminescent Immunometric Assay

(CLIA))

Name

PID No.

SID No.

Age / Sex

Ref. Dr

## INTERPRETATION:

Reference range for cord blood - upto 20

: MED121758976

: 39 Year(s) / Female

: 623006926

: MediWheel

1 st trimester: 0.1-2.5 2 nd trimester 0.2-3.0 3 rd trimester : 0.3-3.0

(Indian Thyroid Society Guidelines)

Comment:

1.TSH reference range during pregnancy depends on Iodine intake, TPO status, Serum HCG concentration, race, Ethnicity and

BMI.

2.TSH Levels are subject to circadian variation, reaching peak levels between 2-4am and at a minimum between 6-10PM. The variation can be of the order of 50%, hence time of the day has influence on the measured serum TSH concentrations. 3. Values & amplt; 0.03 µIU/mL need to be clinically correlated due to presence of rare TSH variant in some individuals.

# **CLINICAL PATHOLOGY**

## **Urine Analysis - Routine**

Colour (Urine)Pale YellowYellow to Amber

Appearance (Urine) Clear Clear

Protein (Urine) Negative Negative

Glucose (Urine) Negative Negative

Pus Cells (Urine) 1-3 /hpf NIL

Epithelial Cells (Urine) 1-2 /hpf NIL

RBCs (Urine) Nil /hpf NIL

-- End of Report --



