240000104877527

Miss. AMBIKA ASHOK
Rhine, E wing, 3rd Avenue Street, Nilje Gaon, Maharashtra, Indi..
Tel No : +919819859374
PIN No: 421204
PID NO: P31824530657311
Age: 58.2 Year(s) Sex: Female

Reference: SELF
Sample Collected At:
Preventive Care(Mhl)
303 Sunrise Business Park Kisan Nagar Road No 16 Wagle Estate Thane - 400604.
Processing Location:- Metropolis Healthcare Ltd,Unit No409-416,4th Floor,Commercial Building-1,Kohinoor Mall,Mumbai-70

VID: 240000104877527
Registered On:
21/08/2024 09:14 AM
Collected On:
21/08/2024 8:05AM
Reported On:
21/08/2024 05:30 PM

SUMMARY REPORT

Investigation Outside Reference Range (Abnormal)

Investigation	Observed Value	Unit	Biological Reference Interval
Glucose fasting (Plasma-F,UV Hexokinase)	**109**	mg/dL	Normal: 70-99 Impaired Fasting Glucose(IFG): 100-125 Diabetes mellitus: >= 126 (on more than one occassion) (American diabetes association guidelines 2022)
HbA1c- Glycated Haemoglobin	**6.6**	%	Non-diabetic: <= 5.6 Pre-diabetic: 5.7-6.4 Diabetic: >= 6.5 Refer interpretation for monitoring ranges.
LDL/HDL RATIO	**2.1**		2.5-3.5

Investigation Within Reference Range (Normal)
CBC Haemogram
Proteins
BilirubinTotal, Direct, IndirectSerum
BUN-Blood Urea Nitrogen
Calcium
Chlorides
Creatinine
ESR - Erythrocyte Sedimentation Rate
Free T3
Phosphorous
Potassium
SGOT (AST)
SGPT (ALT)
Sodium
Free T4
TSH(Ultrasensitive)
Uric Acid
Vitamin B12 level

Miss. AMBIKA ASHOK
Rhine, E wing, 3rd Avenue Street, Nilje Gaon, Maharashtra, Indi..
Tel No : +919819859374
PIN No: 421204
PID NO: P31824530657311
Age: 58.2 Year(s) Sex: Female

240000104877527

Reference: SELF
Sample Collected At:
Preventive Care(mhl)
303 Sunrise Business Park Kisan Nagar Road No 16 Wagle Estate Thane - 400604.
Processing Location:- Metropolis Healthcare Ltd,Unit No409-416,4th Floor,Commercial Building-1,Kohinoor Mall,Mumbai-70

VID: 240000104877527
Registered On:
21/08/2024 09:14 AM
Collected On:
21/08/2024 8:05AM
Reported On:
21/08/2024 05:30 PM

Investigation	Observed Value	Unit	Biological Reference Interval
Glucose fasting (Plasma-F,UV Hexokinase)	**109**	mg/dL	Normal: 70-99 Impaired Fasting Glucose(IFG): 100-125 Diabetes mellitus: >= 126 (on more than one occassion) (American diabetes association guidelines 2022)

Note: An individual may show higher fasting glucose level in comparison to post prandial glucose level due to following reasons : The glycaemic index and response to food consumed, Changes in body composition, Increased insulin response and sensitivity, Alimentary hypoglycemia, Renal glycosuria, Effect of oral hypoglycaemics & Insulin treatment.

Associated Tests: HbA1c (H0018), Diabetes Profile – Maxi (D0021),HOMA Index (H0275), Insulin (I0275).

MC-2139

Tests marked with NABL symbol are accredited by NABL vide Certificate no MC-2139

Dr. LYNDA.RODRIGUES
M.D. Pathology,
Reg.No.2014/02/0456

Miss. AMBIKA ASHOK
Rhine, E wing, 3rd Avenue Street, Nilje Gaon, Maharashtra, Indi..
Tel No : +919819859374
PIN No: 421204
PID NO: P31824530657311
Age: 58.2 Year(s) Sex: Female

Reference: SELF

Sample Collected At:
Preventive Care(mhl)
303 Sunrise Business Park Kisan Nagar Road No 16 Wagle Estate Thane - 400604.
Processing Location:- Metropolis Healthcare Ltd,Unit No409-416,4th Floor,Commercial Building-1,Kohinoor Mall,Mumbai-70

VID: 240000104877527
Registered On: 21/08/2024 09:14 AM
Collected On: 21/08/2024 8:05AM
Reported On: 21/08/2024 05:30 PM

HbA1c- Glycated Haemoglobin, blood by HPLC method

(EDTA Whole Blood)

Investigation	Observed Value	Unit	Biological Reference Interval
HbA1c- Glycated Haemoglobin (HPLC)	**6.6**	%	Non-diabetic: <= 5.6 Pre-diabetic: 5.7-6.4 Diabetic: >= 6.5 Refer interpretation for monitoring ranges.
Estimated Average Glucose (eAG)	142.72	mg/dL	

Interpretation & Remark:

1. HbA1c is used for monitoring diabetic control. It reflects the estimated average glucose (eAG).
2. HbA1c has been endorsed by clinical groups & ADA (American Diabetes Association) guidelines 2017, for diagnosis of diabetes using a cut-off point of 6.5%.
3. Trends in HbA1c are a better indicator of diabetic control than a solitary test.
4. Low glycated haemoglobin(below 4%) in a non-diabetic individual are often associated with systemic inflammatory diseases, chronic anaemia(especially severe iron deficiency & haemolytic), chronic renal failure and liver diseases. Clinical correlation suggested.
5. To estimate the eAG from the HbA1c value, the following equation is used: eAG(mg/dl) = 28.7*A1c-46.7
6. Interference of Haemoglobinopathies in HbA1c estimation.
   A. For HbF > 25%, an alternate platform (Fructosamine) is recommended for testing of HbA1c.
   B. Homozygous hemoglobinopathy is detected, fructosamine is recommended for monitoring diabetic status
   C. Heterozygous state detected (D10/ Tosho G8 is corrected for HbS and HbC trait).
7. **In known diabetic patients, following values can be considered as a tool for monitoring the glycemic control.**
   Excellent Control - 6 to 7 %,
   Fair to Good Control - 7 to 8 %,
   Unsatisfactory Control - 8 to 10 %
   and Poor Control - More than 10 % .

Note : Hemoglobin electrophoresis (HPLC method) is recommended for detecting hemoglobinopathy.

Dr. Sanjay Gohil
M.D. Pathologist
HOD Haematology
Reg No.2009/09/3391

Miss. AMBIKA ASHOK
Rhine, E wing, 3rd Avenue Street, Nilje Gaon, Maharashtra, Indi..
Tel No : +919819859374
PIN No: 421204
PID NO: P31824530657311
Age: 58.2 Year(s) Sex: Female

240000104877527

Reference: SELF
Sample Collected At:
Preventive Care(mhl)
303 Sunrise Business Park Kisan Nagar Road No 16 Wagle Estate Thane - 400604.
Processing Location:- Metropolis Healthcare Ltd,Unit No409-416,4th Floor,Commercial Building-1,Kohinoor Mall,Mumbai-70

VID: 240000104877527
Registered On:
21/08/2024 09:14 AM
Collected On:
21/08/2024 8:05AM
Reported On:
21/08/2024 05:30 PM

Investigation	Observed Value	Unit	Biological Reference Interval
BilirubinTotal, Direct, IndirectSerum (Serum)			
Bilirubin-Total (Diazo method)	0.37	mg/dL	0-1.2

Interpretation :

1. Total Bilirubin is the sum of the unconjugated and conjugated fractions. Total Bilirubin is elevated in hepatitis, cirrhosis, haemolytic disorders , several inherited enzyme deficiencies, and conditions causing hepatic obstruction.
2. Neonatal Bilirubin quantitation is used to monitor diseases causing jaundice in the new-born, chiefly erythroblastosis fetalis (also caused haemolytic disease of the newborn or HDN.)
3. Physiologic jaundice is seen at serum bilirubin concentrations from 7 to 17 mg/dl. Serum bilirubin concentrations greater than 17 mg/dl may be pathologic. The primary concern is the potential for bilirubin encephalopathy or kernicterus.

Bilirubin-Direct (Diazo method)	0.15	mg/dL	0.0-0.3

Note: Direct Bilirubin is elevated in conditions causing hepatic obstruction , hepatitis, cirrhosis, several inherited enzyme deficiencies, and inherited defects in canalicular excretion.

Bilirubin- Indirect (Calculated)	0.22	mg/dL	0.1-1.0
Proteins (Serum)			
Total Protein (Biuret)	6.84	g/dL	6.4-8.3
Albumin (Bromocresol green)	4.23	g/dL	3.5-5.2
Globulin	2.61	g/dL	1.8-3.6
A/G Ratio (Calculated)	1.6		1.1-2.2

Dr. ALAP CHRISTY
MBBS, MD, PGDM-HC Head - Clinical Chemistry
Reg No.2020/12/6991

Miss. AMBIKA ASHOK
Rhine, E wing, 3rd Avenue Street, Nilje Gaon, Maharashtra, Indi..
Tel No : +919819859374
PIN No: 421204
PID NO: P31824530657311
Age: 58.2 Year(s) Sex: Female

Reference: SELF
Sample Collected At:
Preventive Care(mhl)
303 Sunrise Business Park Kisan Nagar Road No 16 Wagle Estate Thane - 400604.
Processing Location:- Metropolis Healthcare Ltd,Unit No409-416,4th Floor,Commercial Building-1,Kohinoor Mall,Mumbai-70

VID: 240000104877527
Registered On: 21/08/2024 09:14 AM
Collected On: 21/08/2024 8:05AM
Reported On: 21/08/2024 05:30 PM

Investigation	Observed Value	Unit	Biological Reference Interval

Interpretation:

- Total Proteins are useful in the diagnosis and treatment of disease involving liver, kidney, bone marrow ,metabolic and nutritional disorders.
- The protein concentration of serum is an indicator of the hydration state of the body.
- Prolonged bed rest results in decreased total protein concentration.
- The A/G ratio measures the relative ratio of albumin to globulin
- Low A/G ratio may indicate viral infections, liver and kidney disease, or autoimmune disorders. These diseases increase globulin and decrease albumin thus lowering the A/G ratio.
- A high A/G ratio may indicate diseases that make the body produce less globulin, such as genetic disorders or may result from the use of immunosuppressive drugs.

Reference:

- Juraschek SP, Moliterno AR, Checkley W, Miller ER 3rd. The Gamma Gap and All-Cause Mortality. PLoS One. 2015 Dec 2;10(12):e0143494
- Busher JT. Serum Albumin and Globulin. In: Walker HK, Hall WD, Hurst JW, editors. Clinical Methods: The History, Physical, and Laboratory Examinations. 3rd edition. Boston: Butterworths; 1990. Chapter 101.
- Pack Insert

SGPT (ALT) (Serum,IFCC w/o pyridoxal phosphate activation)	24	U/L	0-33
SGOT (AST) (Serum,IFCC w/o pyridoxal phosphate activation)	19	U/L	0-32
Creatinine (Serum,Enzymatic(IDMS Traceble))	0.63	mg/dL	0.51-0.95 Kindly note change in Method and reference ranges

Interpretation - Creatinine is a waste product formed in muscles from the high energy storage compound, creatine phosphate. The amount of creatinine produced is constant (unlike Urea) and is primarily a function of muscle mass.
Physiological factors affecting serum creatinine concentration includes age, gender, race, muscularity, exercise, Pregnancy, certain drugs, diet, dehydration and nutritional status.
Low serum Creatinine levels is seen in cases of low muscle mass like muscular atrophy, or aging.
High serum creatinine levels is seen in Acute and Chronic kidney disease, obstruction.
Since a rise in blood creatinine is observed only with marked damage of the nephrons, it is not suited to detect early stage kidney disease.

MC-2139

Tests marked with NABL symbol are accredited by NABL vide Certificate no MC-2139

Dr. ALAP CHRISTY
MBBS, MD, PGDM-HC Head - Clinical Chemistry
Reg No.2020/12/6991

Miss. AMBIKA ASHOK
Rhine, E wing, 3rd Avenue Street, Nilje Gaon, Maharashtra, Indi..
Tel No : +919819859374
PIN No: 421204
PID NO: P31824530657311
Age: 58.2 Year(s) Sex: Female

Reference: SELF

Sample Collected At:
Preventive Care(mhl)
303 Sunrise Business Park Kisan Nagar Road No 16 Wagle Estate Thane - 400604.
Processing Location:- Metropolis Healthcare Ltd,Unit No409-416,4th Floor,Commercial Building-1,Kohinoor Mall,Mumbai-70

VID: 240000104877527
Registered On: 21/08/2024 09:14 AM
Collected On: 21/08/2024 8:05AM
Reported On: 21/08/2024 05:30 PM

Routine Examination Urine

Investigation	Observed Value	Unit	Biological Reference Interval
GENERAL EXAMINATION			
Colour	**Yellow**		Pale Yellow
Transparency (Appearance)	Clear		Clear
Reaction (pH)	5		4.5-8
Specific Gravity	1.019		1.005-1.025
CHEMICAL EXAMINATION (AUTOMATED URINE CHEMISTRY)			
Urine Protein (Albumin) (Protein Error Principle)	Absent		Absent
Urine Ketones (Acetone) (Legals test)	Absent		Absent
Urine Glucose (Sugar) (Glucose Oxidase-Peroxidase)	Absent		Absent
Urobilinogen (Diazonium ion Reaction)	Normal		Normal
Bilirubin (Azo-Diazo Reaction)	Negative		Negative
Nitrite (Griess test)	Negative		Negative
MICROSCOPIC EXAMINATION(CUVETTE BASED IMAGING TECHNOLOGY)			
Red blood cells	0	/hpf	0-2
Dysmorphic Red Blood Cells	Absent		Absent
Pus cells (WBCs)	1.4	/hpf	0-5
Epithelial cells	0.6	/hpf	0-5
Crystals	**2.7**	/hpf	0-1.36
CRY - Calcium-oxalate monohydrate	0		0-1.36
CRY - Calcium-oxalate dihydrate	**2.7**		0-1.36
CRY - Triple-phosphate	0		0-1.36
CRY - Uric acid	0		0-1.36
Casts - Hyalin	0	/hpf	0-2
Casts - Pathological	0	/hpf	0-0.34
Bacteria	45.2	/hpf	0-65.00

Niranjan B Patil

Dr. Niranjan Patil
MD(Micro)
HOD - Microbiology & Molecular Biology
Reg No. 2006/02/0697

Miss. AMBIKA ASHOK
Rhine, E wing, 3rd Avenue Street, Nilje Gaon, Maharashtra, Indi..
Tel No : +919819859374
PIN No: 421204
PID NO: P31824530657311
Age: 58.2 Year(s) Sex: Female

Reference: SELF

Sample Collected At:
Preventive Care(mhl)
303 Sunrise Business Park Kisan Nagar Road No 16 Wagle Estate Thane - 400604.
Processing Location:- Metropolis Healthcare Ltd,Unit No409-416,4th Floor,Commercial Building-1,Kohinoor Mall,Mumbai-70

VID: 240000104877527
Registered On: 21/08/2024 09:14 AM
Collected On: 21/08/2024 8:05AM
Reported On: 21/08/2024 05:30 PM

Trichomonas Vaginalis	Absent		Absent
Yeast cells	0	/hpf	0-0.68

1. Urine routine and microscopy is a screening test.
2. Abnormal results of chemical examination are confirmed by manual methods.
3. Chemical examination through Dipstick includes test methods as Protein (Protein Error Principle), Glucose (Glucose Oxidase-Peroxidase), Ketone (Legals Test), Bilirubin (Azo- Diazo reaction), Urobilinogen (Diazonium ion Reaction) Nitrite (Griess Method).
4. All abnormal results of chemical examination are confirmed by manual methods. Manually pH checked by pH paper, Specific gravity by Urinometer, Protein by sulfosalicylic acid method, Glucose by Benedict's method, Ketone by Rothera's method, Bile salt by Sulfur granule method, Bile pigment by Fouchet method, Urobilinogen by Ehrlich Method, Nitrite by Nitrate reduction test.
5. Pre-test conditions to be observed while submitting the sample- First void, mid-stream urine, collected in a clean, dry, sterile container is recommended for routine urine analysis, avoid contamination with any discharge from vaginal, urethra, perineum, as applicable, avoid prolonged transit time & undue exposure to sunlight.
6. During interpretation, points to be considered are Negative nitrite test does not exclude the presence of the bacteria or urinary tract infections.
7. Trace proteinuria can be seen with many physiological conditions like prolonged recumbency, exercise, high protein diet etc.
8. False reactions for bile pigments, proteins, glucose and nitrites can be caused by peroxidase like activity by disinfectants, therapeutic dyes, ascorbic acid and certain drugs etc.
9. Physiological variations may affect the test results.
10. The Microscopic examination findings reported are in decimal numbers as they represent arithmetic mean of multiple fields scanned using Microscopy.

MC-2139

Tests marked with NABL symbol are accredited by NABL vide Certificate no MC-2139

Dr. Niranjan Patil
MD(Micro)
HOD - Microbiology & Molecular Biology
Reg No. 2006/02/0697

Miss. AMBIKA ASHOK
Rhine, E wing, 3rd Avenue Street, Nilje Gaon, Maharashtra, Indi..
Tel No : +919819859374
PIN No: 421204
PID NO: P31824530657311
Age: 58.2 Year(s) Sex: Female

Reference: SELF
Sample Collected At:
Preventive Care(mhl)
303 Sunrise Business Park Kisan Nagar Road No 16 Wagle Estate Thane - 400604.
Processing Location:- Metropolis Healthcare Ltd,Unit No409-416,4th Floor,Commercial Building-1,Kohinoor Mall,Mumbai-70

VID: 240000104877527
Registered On:
21/08/2024 09:14 AM
Collected On:
21/08/2024 8:05AM
Reported On:
21/08/2024 05:30 PM

Investigation	Observed Value	Unit	Biological Reference Interval
BUN-Blood Urea Nitrogen (Serum,Urease)	12.0	mg/dL	6-20

Remark: In blood, Urea is usually reported as BUN and expressed in mg/dl. BUN mass units can be converted to urea mass units by multiplying by 2.14.

Sodium (Serum,ISE Indirect)	139	mmol/L	136-145

Interpretation:
- Low levels are noted in prolonged vomiting or diarrhea, diminished reabsorption in the kidney and excessive fluid retention. High levels are seen in case of excessive fluid loss, high salt intake and increased kidney reabsorption

Potassium (Serum,ISE Indirect)	4.20	mmol/L	3.5-5.1

Interpretation:
- Low levels are noted in reduced intake of dietary potassium or excessive loss of potassium from the body due to diarrhea, prolonged vomiting or increased renal excretion. High levels may be caused by dehydration or shock, severe burns, hemolysis, diabetic ketoacidosis, and retention of potassium by the kidney

Chlorides (Serum,ISE Indirect)	104	mmol/L	98-107

Interpretation:
- **Low levels** are noted in reduced dietary intake, prolonged vomiting and reduced renal reabsorption as well as some forms of acidosis and alkalosis. High levels are found in dehydration, kidney failure, some forms of acidosis, high dietary or parenteral chloride intake, and salicylate poisoning.

Uric Acid (Serum,Uricase)	4.9	mg/dL	2.4-5.7

Dr. ALAP CHRISTY
MBBS, MD, PGDM-HC Head - Clinical Chemistry
Reg No.2020/12/6991

Miss. AMBIKA ASHOK
Rhine, E wing, 3rd Avenue Street, Nilje Gaon, Maharashtra, Indi..
Tel No : +919819859374
PIN No: 421204
PID NO: P31824530657311
Age: 58.2 Year(s) Sex: Female

240000104877527

Reference: SELF
Sample Collected At:
Preventive Care(mhl)
303 Sunrise Business Park Kisan Nagar Road No 16 Wagle Estate Thane - 400604.
Processing Location:- Metropolis Healthcare Ltd,Unit No409-416,4th Floor,Commercial Building-1,Kohinoor Mall,Mumbai-70

VID: 240000104877527
Registered On:
21/08/2024 09:14 AM
Collected On:
21/08/2024 8:05AM
Reported On:
21/08/2024 05:30 PM

Investigation	Observed Value	Unit	Biological Reference Interval

Interpretation:

- Increased in Gout, asymptomatic hyperuricemia, leukemia, polycythemia, hemolytic anemia, sickle cell anemia, resolving pneumonia, toxemia of pregnancy, psoriasis, lymphoma, metabolic acidosis, chronic lead poisoning.
- Decreased in disorders of copper accumulation , kidney tubule disorder, Acromegaly, Celiac disease, Xanthine oxidase deficiency.
- Its used to monitor gout and also chemotherapeutic treatment of neoplasm to avoid renal urate deposition with possible renal failure (tumor lysis syndrome).

Note:

- A purine rich diet as well as sever exercise increases uric acid values.
- High protein-weight reduction diet and alcohol consumption can cause raised uric acid levels.

Reeference:

- Package insert
- Wallach’s interpretation of diagnostic tests, Ed11, 2020.
- Henry's Clinical Diagnosis and Management by Laboratory Methods. 23rd ed; 2017.
- Tietz fundamentals of clinical chemistry 6th edition. Burtis CA, Ashwood ER, Bruns DE, 2008.

Phosphorous (Serum,Molybdate UV)	3.4	mg/dL	2.5-4.5
Calcium (Serum,NM-BAPTA)	8.8	mg/dL	8.6-10.0

Dr. ALAP CHRISTY
MBBS, MD, PGDM-HC Head - Clinical Chemistry
Reg No.2020/12/6991

Miss. AMBIKA ASHOK
Rhine, E wing, 3rd Avenue Street, Nilje Gaon, Maharashtra, Indi..
Tel No : +919819859374
PIN No: 421204
PID NO: P31824530657311
Age: 58.2 Year(s) Sex: Female

240000104877527

Reference: SELF
Sample Collected At:
Preventive Care(mhl)
303 Sunrise Business Park Kisan Nagar Road No 16 Wagle Estate Thane - 400604.
Processing Location:- Metropolis Healthcare Ltd,Unit No409-416,4th Floor,Commercial Building-1,Kohinoor Mall,Mumbai-70

VID: 240000104877527
Registered On:
21/08/2024 09:14 AM
Collected On:
21/08/2024 8:05AM
Reported On:
21/08/2024 05:30 PM

Investigation	Observed Value	Unit	Biological Reference Interval
Free T3 (Serum,ECLIA)	3.07	pg/mL	2.0-4.4 First Trimester :2.46 - 3.49 Second Trimester : 2.09 - 3.55 Third trimester : 2.01 - 3.27

Interpretation :

Total T3 & T4 values may also be altered in other conditions due to changes in serum proteins or binding sites Pregnancy, Drugs (Androgens,Estrogens, O C Pills ,Phenytoin), Nephrosis etc. In such cases Free T3 and Free T4 give corrected values.

Note :
Patients on Biotin supplement may have interference in some immunoassays. With individuals taking high dose Biotin (more than 5 mg per day) supplements, at least 8-hour wait time before blood draw is recommended.
Ref: Arch Pathol Lab Med—Vol 141, November 2017

Free T4 (Serum,ECLIA)	1.36	ng/dL	0.93-1.7 First Trimester : 0.7-2.0 Second Trimester : 0.5-1.6 Third Trimester : 0.5-1.6

Interpretation :

Total T3 & T4 values may also be altered in other conditions due to changes in serum proteins or binding sites Pregnancy, Drugs (Androgens,Estrogens, O C Pills ,Phenytoin), Nephrosis etc. In such cases Free T3 and Free T4 give corrected values.

Note :
Patients on Biotin supplement may have interference in some immunoassays. With individuals taking high dose Biotin (more than 5 mg per day) supplements, at least 8-hour wait time before blood draw is recommended.
Ref: Arch Pathol Lab Med—Vol 141, November 2017

TSH(Ultrasensitive) (Serum,ECLIA)	3.040	µIU/mL	0.54-5.3 First Trimester : 0.33-4.59 Second Trimester : 0.35-4.10 Third trimester : 0.21-3.15

Dr. ALAP CHRISTY
MBBS, MD, PGDM-HC Head - Clinical Chemistry
Reg No.2020/12/6991

Miss. AMBIKA ASHOK
Rhine, E wing, 3rd Avenue Street, Nilje Gaon, Maharashtra, Indi..
Tel No : +919819859374
PIN No: 421204
PID NO: P31824530657311
Age: 58.2 Year(s) Sex: Female

240000104877527

Reference: SELF
Sample Collected At:
Preventive Care(mhl)
303 Sunrise Business Park Kisan Nagar Road No 16 Wagle Estate Thane - 400604.
Processing Location:- Metropolis Healthcare Ltd,Unit No409-416,4th Floor,Commercial Building-1,Kohinoor Mall,Mumbai-70

VID: 240000104877527
Registered On:
21/08/2024 09:14 AM
Collected On:
21/08/2024 8:05AM
Reported On:
21/08/2024 05:30 PM

Investigation	Observed Value	Unit	Biological Reference Interval

Interpretation :

- Increased TSH is seen with intake of Iodine, Lithium, Amiodarone drugs and also indicates considerable physiologic & seasonal variation.
- Decreased TSH values require correlation with patient age & clinical symptoms and seen with intake of few drugs e.g. L-dopa, glucocorticoids.
- Transient alteration in TSH is seen in non-thyroidal illness like severe infections, liver disease, renal and heart failure, severe burns, trauma and surgery etc.

Clinical Utility: Levels of TSH are used for monitoring of thyroid related disorders.

Caution: Patients on Biotin supplement may have interference in some immunoassays. For sample collection, at least 8-hours wait time is recommended for individuals taking high dose of Biotin (more than 5 mg per day) supplements.

Note: TSH levels may fluctuate based on few factors such as pregnancy, illness and age. Also, time of sample collection, technologies used to analyze the test, usage of certain drugs, diet may have impact on TSH levels. TSH may show around 50% variation even when done at different times of day due to its association with circadian rhythm.

Associated Tests: T3 (T0029), T4 (T0031) free T3 (T0028), free T4 (T0030), reverse T3 (R1004), Thyroid Antibodies (T0061), Thyroid Comprehensive Profile-1 (T0062)

Reference:

- Clinical Chemistry 50:12, 2338-2344 (2004) and Ind J Clin Biochem (Apr-June 2014) 29(2):189–195.
- Ref: Arch Pathol Lab Med—Vol 141, November 2017.
- Fisher DA. Physiological variations in thyroid hormones: physiological and pathophysiological considerations. Clin Chem. 1996 Jan;42(1):135-9. PMID: 8565215

MC-2139

Tests marked with NABL symbol are accredited by NABL vide Certificate no MC-2139

Dr. ALAP CHRISTY
MBBS, MD, PGDM-HC Head - Clinical Chemistry
Reg No.2020/12/6991

Miss. AMBIKA ASHOK
Rhine, E wing, 3rd Avenue Street, Nilje Gaon, Maharashtra, Indi..
Tel No : +919819859374
PIN No: 421204
PID NO: P31824530657311
Age: 58.2 Year(s) Sex: Female

240000104877527

Reference: SELF

Sample Collected At:
Preventive Care(mhl)
303 Sunrise Business Park Kisan Nagar Road No 16 Wagle Estate Thane - 400604.
Processing Location:- Metropolis Healthcare Ltd,Unit No409-416,4th Floor,Commercial Building-1,Kohinoor Mall,Mumbai-70

VID: 240000104877527
Registered On: 21/08/2024 09:14 AM
Collected On: 21/08/2024 8:05AM
Reported On: 21/08/2024 05:30 PM

CBC Haemogram

Investigation	Observed Value	Unit	Biological Reference Interval
Erythrocytes			
Haemoglobin (Hb)	13.5	gm/dL	12.0-16
Erythrocyte (RBC) Count	4.56	mill/cu.mm	4.2-5.4
PCV (Packed Cell Volume)	41.1	%	37-47
MCV (Mean Corpuscular Volume)	90.2	fL	82-101
MCH (Mean Corpuscular Hb)	29.6	pg	27-34
MCHC (Mean Corpuscular Hb Concn.)	32.8	g/dL	31.5-36
RDW (Red Cell Distribution Width)	13.7	%	11.5-14.0
RBC Morphology			
Remark	Normocytic Normochromic		
Leucocytes			
Total Leucocytes (WBC) count	7,900	cells/cu.mm	4300-10300
Absolute Neutrophils Count	4898	/c.mm	2000-7000
Absolute Lymphocyte Count	2236	/c.mm	1000-3000
Absolute Monocyte Count	466	/c.mm	200-1000
Absolute Eosinophil Count	253	/c.mm	20-500
Absolute Basophil Count	47	/c.mm	20-100
Neutrophils	62.0	%	40-80
Lymphocytes	28.3	%	20-40
Monocytes	5.9	%	2-10
Eosinophils	3.2	%	1-6
Basophils	0.6	%	0-2
Platelets			
Platelet count	301	10^3 / µl	140-440
MPV (Mean Platelet Volume)	9.3	fL	7.8-11
PCT (Platelet crit)	0.281	%	0.2-0.5
PDW (Platelet Distribution Width)	16.6	%	9-17

Dr. Sanjay Gohil
M.D. Pathologist
HOD Haematology
Reg No.2009/09/3391

Miss. AMBIKA ASHOK
Rhine, E wing, 3rd Avenue Street, Nilje Gaon, Maharashtra, Indi..
Tel No : +919819859374
PIN No: 421204
PID NO: P31824530657311
Age: 58.2 Year(s) Sex: Female

240000104877527

Reference: SELF

Sample Collected At:
Preventive Care(mhl)
303 Sunrise Business Park Kisan Nagar Road No 16 Wagle Estate Thane - 400604.
Processing Location:- Metropolis Healthcare Ltd,Unit No409-416,4th Floor,Commercial Building-1,Kohinoor Mall,Mumbai-70

VID: 240000104877527
Registered On:
21/08/2024 09:14 AM
Collected On:
21/08/2024 8:05AM
Reported On:
21/08/2024 05:30 PM

EDTA Whole Blood-Tests done on Automated Five Part Cell Counter. (RBC and Platelet count by impedance/Hydrodynamic focusing,WBC and differential by VCS technology/Impedance/Flow cytometry.Rest are calculated parameters).All Abnormal Haemograms are reviewed confirmed microscopically.Differential count is based on approximately 10,000 cells.

MC-2139

Tests marked with NABL symbol are accredited by NABL vide Certificate no MC-2139

Dr. Sanjay Gohil
M.D. Pathologist
HOD Haematology
Reg No.2009/09/3391

Miss. AMBIKA ASHOK
Rhine, E wing, 3rd Avenue Street, Nilje Gaon, Maharashtra, Indi..
Tel No : +919819859374
PIN No: 421204
PID NO: P31824530657311
Age: 58.2 Year(s) Sex: Female

240000104877527

Reference: SELF
Sample Collected At:
Preventive Care(mhl)
303 Sunrise Business Park Kisan Nagar Road No 16 Wagle Estate Thane - 400604.
Processing Location:- Metropolis Healthcare Ltd,Unit No409-416,4th Floor,Commercial Building-1,Kohinoor Mall,Mumbai-70

VID: 240000104877527
Registered On:
21/08/2024 09:14 AM
Collected On:
21/08/2024 8:05AM
Reported On:
21/08/2024 05:30 PM

Investigation	Observed Value	Unit	Biological Reference Interval
Lipid Profile-2 (Serum)			
Cholesterol-Total (Enzymatic)	159	mg/dL	Desirable: < 200 Borderline High: 200-240 High: >= 240
Triglycerides level (Enzymatic)	135	mg/dL	Normal: < 150 Borderline High: 150-199 High: 200-499 Very High: >= 500
HDL Cholesterol (Homogeneous enzymatic colorimetric assay)	43	mg/dL	Major risk factor for heart disease: < 40 Negative risk factor for heart disease: >= 60
Non HDL Cholesterol (Calculated)	116.1	mg/dL	Optimal: < 130 Desirable: 130-159 Borderline high: 159-189 High: 189-220 Very High: >= 220
LDL Cholesterol (Calculated)	89.1	mg/dL	Optimal: < 100 Near Optimal: 100-129 Borderline high: 130-159 High: 160-189 Very High: >= 190
VLDL Cholesterol (Calculated)	27.00	mg/dL	6-38
LDL/HDL RATIO (Calculated)	**2.1**		2.5-3.5
CHOL/HDL RATIO (Calculated)	3.71		3.5-5

Note: Reference Interval as per National Cholesterol Education Program (NCEP) Adult Treatment Panel III Report.

VLDL,CHOL/HDL RATIO,LDL/HDL RATIO,LDL Cholesterol,serum,Non HDL Colesterol are calculated parameters

Dr. ALAP CHRISTY
MBBS, MD, PGDM-HC Head - Clinical Chemistry
Reg No.2020/12/6991

Miss. AMBIKA ASHOK
Rhine, E wing, 3rd Avenue Street, Nilje Gaon, Maharashtra, Indi..
Tel No : +919819859374
PIN No: 421204
PID NO: P31824530657311
Age: 58.2 Year(s) Sex: Female

240000104877527

Reference: SELF
Sample Collected At:
Preventive Care(mhl)
303 Sunrise Business Park Kisan Nagar Road No 16 Wagle Estate Thane - 400604.
Processing Location:- Metropolis Healthcare Ltd,Unit No409-416,4th Floor,Commercial Building-1,Kohinoor Mall,Mumbai-70

VID: 240000104877527
Registered On:
21/08/2024 09:14 AM
Collected On:
21/08/2024 8:05AM
Reported On:
21/08/2024 05:30 PM

Investigation	Observed Value	Unit	Biological Reference Interval
ESR - Erythrocyte Sedimentation Rate (EDTA Whole Blood)	5	mm/hr	0-20

Method: Westergren

Interpretation:

1. It indicates presence and intensity of an inflammatory process, never diagnostic of a specific disease. Changes are more significant than a single abnormal test.
2. It is a prognostic test and used to monitor the course or response to treatment of diseases like tuberculosis, bacterial endocarditis, acute rheumatic fever, rheumatoid arthritis, SLE, Hodgkins disease, temporal arteritis, polymyalgia rheumatica.
3. It is also increased in pregnancy, multiple myeloma, menstruation, and hypothyroidism.

Dr. SANJAY GOHIL
M.D. Pathologist
HOD Haematology
Reg No.2009/09/3391

Miss. AMBIKA ASHOK
Rhine, E wing, 3rd Avenue Street, Nilje Gaon, Maharashtra, Indi..
Tel No : +919819859374
PIN No: 421204
PID NO: P31824530657311
Age: 58.2 Year(s) Sex: Female

Reference: SELF
Sample Collected At:
Preventive Care(mhl)
303 Sunrise Business Park Kisan Nagar Road No 16 Wagle Estate Thane - 400604.
Processing Location:- Metropolis Healthcare Ltd,Unit No409-416,4th Floor,Commercial Building-1,Kohinoor Mall,Mumbai-70

VID: 240000104877527
Registered On:
21/08/2024 09:14 AM
Collected On:
21/08/2024 8:05AM
Reported On:
21/08/2024 05:30 PM

Investigation	Observed Value	Unit	Biological Reference Interval
Vitamin B12 level (Serum,ECLIA)	609.00	pg/mL	197-771

Interpretation :

1. Vit B12 levels are decreased in megaloblastic anemia, partial/total gastrectomy, pernicious anemia, peripheral neuropathies, chronic alcoholism, senile dementia, and treated epilepsy.
2. An associated increase in homocysteine levels is an independent risk marker for cardiovascular disease and deep vein thrombosis.
3. Holo Transcobalamin II levels are a more accurate marker of active VitB12 component.

Caution:

- Patients on Biotin supplement may have interference in some immunoassays. With individuals taking high dose Biotin (more than 5 mg per day) supplements, at least 8-hour wait time before blood draw is recommended.

Disclaimer:

- High levels of Vitamin B12 may be due to exogenous supplementation. Kindly correlate clinically.

Associated Tests

- Active Vitamin B12 (V0012), Homocysteine reflex Vitamin B12-folate serum (H0310), Homocysteine Serum (H0254),RBC Folate R0007.

Reference:

1. Package insert
2. Arch Pathol Lab Med—Vol 141, November 2017

-- End of Report --

Tests marked with NABL symbol are accredited by NABL vide Certificate no MC-2139

Dr. ALAP CHRISTY
MBBS, MD, PGDM-HC Head - Clinical Chemistry
Reg No.2020/12/6991