GENERAL DIAGNOSTICS

INTERNATIONAL (P) LTD., House No 5, Sai Angan, S. No 82/4/1,

Plot No 14/15, Baner sekle, Pune-411045

Customer Support : +91 98717 15111











22 Year(s) 0 Months(s) 0 Day(s)/Female Name: MISS. SUJATA OHAL Age/Gender:

Referred By: N.A **Client Name:** AAROHI PATH LAB

21-01-2023 15:51:00 **Collection Date:** Report Release Date: 21-01-2023 18:52:55

N	o. Investigation	Observed Value	Unit	Biological Ref. Interval			
Con	nplete Haemogram Test						
Ery	throcytes						
1	Total Red Blood Cell Count (RBC)	5.33	10^6/μL	4.1-5.1			
2	Hemoglobin	7.7	g/dL	12.3-15.3			
3	Hematocrit (PCV)	27.7	%	33-57			
4	Mean Corpuscular Volume (MCV)	51.9	\mathbf{fL}	80-96			
5	Mean Corpuscular Hemoglobin (MCH)	14.4	pg	27.5-33.2			
6	Mean Corpuscular Hemoglobin Concentration (MCHC)	27.9	g/dL	29.4- 34.5			
7	Red Cell Distribution Width (RDW-CV)	21.0	%	12-15			
8	Red Cell Distribution Width-SD(RDW-SD)	39.4	fl	32-60.4			
9	Nucleated Red Blood Cells	0.0	cells/μL	0 - 1.36			
10	Nucleated Red Blood Cells Percentage	0.0	%	0-4			
Pla	telets						
11	Platelet Count	409.0	$10^3/\mu L$	150-450			
12	Mean Platelet Volume (MPV)	8.5	fL	6 - 12			
13	Platelet Distribution Width (PDW)	17.0	%	15.5-18.3			
14	Plateletcrit (PCT)	0.349	%	0.12-0.37			
Let	Leucocytes						
15	Total Leucocytes Count	4.7	$10^3/\mu L$	4.4-11			
16	Neutrophils	44.8	%	40-77			
17	Lymphocyte Percentage	42.5	%	16-44			
18	Monocytes Percentage	8.9	%	2.0-10.0			
19	Eosinophils Percentage	3.0	%	0-7			
20	Basophils Percentage	0.8	%	0 - 1			
21	Neutrophils-Absolute Count	2.11	$10^3/\mu L$	1.8-7.8			
22	Lymphocytes-Absolute Count	2.00	$10^3/\mu L$	1-4.8			
23	Monocytes-Absolute Count	0.42	$10^3/\mu L$	0.1-1.0			
24	Eosinophils-Absolute Count	0.14	$10^3/\mu L$	0 - 0.45			



CRM No:5244146

Sample Recd. Time: 21-01-2023 17:16 Report Time: 21-01-2023 18:52 Patient Name: MISS. SUJATA OHAL

Patient ID: 5244146



Authorized Signatory Dr. Prachi Jadhav MBBS,MD (Pathology)



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22 Year(s) 0 Months(s) 0 Day(s)/Female

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AAROHI PATH LAB

Collection Date:	21-01-2023 15:51:00	Report Release Date:	21-01-2023 18:52:5
Collection Date:	21-01-2023 15:51:00	Report Release Date:	21-01-2023 18:52:

No.	Investigation	Observed Value	Unit	Biological Ref. Interval
Leucocytes				
25 Basophils-A	bsolute Count	0.04	10^3/μL	0-0.2
Peripheral Bloo	od Smear			
26 RBC Morpho	ology	See Remark		
27 WBC Morph	nology	Within Normal Range		
28 Platelets		Adequate On Smear		

Remarks

RBC- Microcytic (++) hypochromic pencil cells target cells few fragmented RBCs Advice - Iron Studies And Ferritin

Interpretation

Sample type: EDTA whole blood.

Test Methods:

RBC/WBC/Platelets: Impedance method,

Hemoglobin: Photometric measurement,

Differential count: VCSn Technology,

MCV, MPV: Measured parameter Indices,

Absolute counts: Calculated.

(Processed on Fully Automated 5 parts differential Hematology analyzer).



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Day(s)/Female

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Client Name:

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Collection Date: 21-01-2023 15:51:00

Report Release Date: 21-01-2023 18:52:55

No.	Investigation	Observed Value	Unit	Biological Reference Interval
Thy	yroid Profile - Total T3,Total T4,TSI	H (TFT)		
1	Total T3 Serum, Method: CLIA	111.92	ng/dL	60 - 200
2	Total T4 Serum, Method: CLIA	8.88	μg/dL	4.5 - 14.5
3	TSH (Thyroid Stimulating Hormone) Serum, Method: CLIA	6.683	μIU/ml	0.35 - 5.5

Interpretation

- 1. Triodothyronine (T3) is produced by the thyroid gland and along with thyroxine (T4) help control the rate at which the body uses energy. Elevated T3 denote hyperthyroidism while low levels indicate hypothyroidism.
- 2.The most common causes of thyroid dysfunction are related to autoimmune disorders. Graves disease causes hyperthyroidism, but it can also be caused by thyroiditis, thyroid cancer, and excessive production of TSH. Total T3 is used to assess thyroid function.
- 3. Elevated T4 levels may indicate hyperthyroidism. They may also indicate other thyroid problems, such as thyroiditis or toxic multinodular goiter. Abnormally low levels of T4 may indicate: dietary issues, such as fasting, malnutrition, or an iodine deficiency, medications that affect protein levels, hypothyroidism, illness.
- 4. Thyroid-stimulating hormone (TSH) stimulates the production and release of T4 (primarily) and T3. They help control the rate at which the body uses energy and are regulated by a feedback system. Most of the T4 circulates in the blood bound to protein, while a small percentage is free (not bound).
- 5. Lab has estimated Total T4 reference intervals that are specific for India, using the indirect sampling technique following CLSI EP28-A3c document: Defining Establishing, and Verifying Reference Intervals in the Clinical Laboratory: Approved Guideline-Third Edition.
- 5. Thyroid hormone status during pregnancy:

Pregnancy stage	TSH (μIU/ml)	T3 (ng/dl)	T4 (μg/dL)
First trimester	0.05-3.70	71-175	6.5-10.1
Second trimester	0.31-4.35	91-195	7.5-10.3
Third trimester	0.41-5.18	104-182	6.3-9.7



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No. Investigation	Observed Value	Unit	Biological Reference Interval
1 Vitamin B12 Serum Method: CLIA	70.0	pg/ml	120 - 807

Interpretation

Low B12 level in a person with signs and symptoms indicates that the person has a deficiency but does not necessarily reflect the severity of the anemia or associated neuropathy. Vitamin B12 levels are decreased in megaloblastic anaemia, partial/total gastrectomy, pernicious anaemia, peripheral neuropathy, chronic alcoholism, senile dementia, and treated epilepsy. Associated increased in homocysteine levels and Vitamin B12 has better predictivity for cardiovascular disease and deep vein thrombosis. Holo-Transcobalamin II levels and methylmalonic acid levels are more accurate markers of active Vitamin B12 component. Additional tests are usually done to investigate the underlying cause of the deficiency.

In method comparison study done at our centre, we found acceptable correlation and these results showed that there was no statistically significant between our methods and other Lab procedures (like, CLIA, CMIA, ELISA, IFA etc). The harmonization between total vitamin B12 assays is variable and individual results can differ significantly between assays. Though cut-off value of 200 pg/mL was used commonly, however, since there is not a reference method for measuring vitamin B12, this cut-off value may not be suitable to use in the evaluation of cobalamin deficiency diagnosis. Until the harmonization study between measurement methods is concluded, it is always suggested by NABL that laboratories should use their own reference values or reference values for Lab assay methods instead of cut-off value of 200 pg/mL.

2 25 - OH Vitamin D

Serum, Method: CLIA

5.5

ng/mL

Deficiency: <20 Insufficiency: 20 - 30

Sufficiency: 30 - 100 Toxicity: > 100

Interpretation

- 1. The 25-hydroxyvitamin D is the major form found in the blood and is the relatively inactive precursor to the active hormone, 1,25-dihydroxyvitamin D. Because of its long half-life and higher concentration, 25-hydroxyvitamin D is commonly measured to assess and monitor vitamin D status in individuals. A low blood level of 25-hydroxyvitamin D may mean that a person is not getting enough exposure to sunlight or enough dietary vitamin D to meet his or her body's demand or that there is a problem with its absorption from the intestines.
- 2. Vitamin D is a fat soluble vitamin and exists in two main forms as cholecalciferol (vitamin D3) which is synthesized in skin from 7-dehydrocholesterol in response to sunlight exposure & Ergocalciferol(vitamin D2) present mainly in dietary sources.Both cholecalciferol & Ergocalciferol are converted to 25(OH)vitamin D in liver. 3. Testing for 25(OH) vitamin D is recommended as it is the best indicator of vitamin D nutritional status.

End Of Report



CRM No:5244146

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Prairie

Authorized Signatory Dr. Prachi Jadhav MBBS,MD (Pathology)



QUALITY POLICY

GENERAL DIAGNOSTICS INTERNATIONAL (P) Ltd. maintains the highest standards of quality control in all aspects of laboratory work. The purpose of our laboratory's Quality Management System is to ensure that:

- Principles of all accreditations, including that of NABL ISO1518:2012 (National Accreditation Board of Laboratories) are adhered for each test in the scope of the accreditation, and beyond.
- Test methods, processes and control mechanisms are timely updated and fully validated to ensure the accuracy and reliability of our test results.

The objectives of our Quality Control system are:

- Use Bar-Coded operations to enable full traceability throughout the sample flow process and to ensure sample handling
 procedures and environmental conditions are managed well and there is no or minimal affect on the results.
- Continually improve the practices of our clients, franchise partners, associate doctors, clinics and hospitals and monitor their training needs. Be proactive in identifying gaps in the processes being followed. Guide them to ensure that the patients are served in the best possible way.
- Report the results with accuracy and clarity in a timely manner. Do a root cause analysis whenever there is a deviation against protocols and find solutions to the identified causes.
- Ensure a continual enhancement, implementation and maintenance of the quality system and seek improvement in the effectiveness of the quality system from experts at regular intervals.
- Meet and exceed expectations with respect to turn-around time, sample collection hygiene & reliability of service.
- Ensure that each test is performed by qualified and trained staff. Provide opportunities to the staff so that they can increase their knowledge and use the same for self and organizational betterment.
- Ensure that the equipment used are best in class, properly maintained and calibrated and where possible, measurements are traceable to recognized standards. Also explore methods which may lead to improvement in equipment performance and methodologies used for conducting tests.
- Enable technology upgrades to achieve higher accuracy and reduced complexities.
- Use internal audits and other checks to ensure the quality system complies with requirements; ensure problems are investigated promptly, root cause(s) established and effective action taken to prevent a recurrence.
- Have a smooth communication mechanism to ensure information is made available as rapidly as possible to those who need it, both internal and external to the organization.
- Monitor, help and support our franchise and service partners to be sensitive on all aspects of service delivery and to ensure quality standards are followed with no exceptions.

CONDITIONS of REPORTING

- It is presumed that the specimen accompanying the TRF (Test Requisition Form where the details of patient are recorded) is of the same patient whose details are there in the TRF
- 02. A test requested might not be performed due to the following reasons (s):
 - $2.1\ In sufficient\ quantity\ of\ specimen\ required\ to\ conduct\ the\ test.$
 - 2.2 Poor quality of the Specimen not meeting the quality criteria (hemolysis of sample/clotted.)
 - $2.3\,Incorrect\,specimen\,type\,as\,required\,to\,conduct\,a\,test.$
- 03. Test(s) may be patly or fully cancelled due to incorrect test code, incorrect name of the test or incorrect type of specimen. A communication shall be made and it is expected that a fresh specimen will be sent to laboratory for analysis of same parameter(s).
- 04. The results of laboratory investigation are dependent on the quality of the specimen as well as the assay procedures/technologies used. All samples collected for tests are required to be prepared, stored, labeled and brought to processing laboratory as per the prescribed guidelines of GENERAL DIAGNOSTICS.
- 05. GENERAL DIAGNOSTICS laboratory cannot be held liable for incorrect results of a sample which deviated from the guidelines issued.
- 06. There can be several factors like sample's unintended exposure to heat or travel through rough terrain which affect the quality of test results. Therefore a 2% chance of error/ deviation in results is a possibility.

- 07. For certain category of tests, the report may carry a "PRELIMINARY" status implying that the results are yet to be reported for one (or more) tests. For example, in the case with certain microbiology tests, a "FINAL" culture, identification or drug susceptibility result might be pending. In such case, the status "RESULT PENDING" will be mentioned on report. The same shall be replaced by the test results whenever it is ready.
- 08. If the collection date or any other details was not stated in the Test Requisition Form, the same will not be printed on the report. In cases where the missing information is mandatory for report generation or meeting accreditation guidelines, the sample shall not be processed at all.
- 09. Tests parameters excluded from the "scope" of NABL accreditation shall be marked by asterisks.
- 10. In case you are not the intended recipient of the report, please immediately inform the same to the issuing entity. Any use, disclosure, copy or distribution of any contents of such report, is unlawful and is strictly prohibited.
- Some test may be referred to other laboratories to provide a wider test menu to the
 patients. The details of the laboratory where the sample was referred to, can be
 obtained from Customer Care department.
- Claims of comparing results against that from a different laboratory shall be looked into only if it was the same sample which was split and sent in same conditions to all laboratories and processed on the same technology.



इस श्रिष्टि का मूल आधार है "बेटी" माता पिता ही नहीं, देश का सम्मान है "बेटी" बेटी बचाओ बे 🛜 पढ़ाओ