AMPATH JAMMU Dr K.Ds Multi speciality Hospital Marble Market Road, Opp Jain Builder, Narwal, Jammu, Jammu and Kas





LABORATORY REPORT



Test Name	Result	Biological Ref. Interval	Unit
Am-Fit Shubh Health			
	HAEMATOLOG	θY	
Complete Blood Counts (Whole Blood - EDTA)			
(Automated Hematology Analyzer & Micros	сору)		
Hemoglobin	13.8	13.0 - 17.0	g/dL
RBC Count	5.1	4.5 - 5.5	10^6/µL
Hematocrit	45.4	40 - 50	%
MCV(Mean Corpuscular Volume)	89.2	83 - 101	fL
MCH(Mean Corpuscular Hemoglobin)	27.1	27 - 32	pg
MCHC(Mean Corpuscular Hemoglobin Concentration)	30.4 L	31.5 - 34.5	g/dL
RDW	15.8 H	11.6 - 14	%
Total Leukocyte Count Electrical impedance/Cell counter	8.0	4.0 - 11.0	10³/µl
Differential count % (VCSn Technology & I	ight microscopy)		
Neutrophils	61.0	40-80%	%
Lymphocytes	30.0	20-40%	%
Monocytes	4.0	2-10%	%
Eosinophils	5.0	1-6%	%
Basophils	0.0	0-1%	%
Differential Counts, Absolute(calculated)			
Absolute Neutrophil Count	4.88	2.0-7.0	10³/µl
Absolute Lymphocyte Count	2.40	1.0-3.0	10³/µl
Absolute Monocyte Count	0.32	0.2 - 1.0	10³/µl
Absolute Eosinophil Count (AEC)	0.40	0.02-0.5	10³/µl
Absolute Basophil Count	0.00	0.02 - 0.1	10³/µl
Platelet Count Electrical impedance/Cell counter or Manual	157	150 - 410	10³/µl
MPV	14.0 H	7.5 - 11.5	fL

This is an electronically authenticated laboratory report.



AmPath collaborates directly with UPMC, one of the top ten hospitals in the United States according to US News & World Report.





LABORATORY REPORT



Test Name	Result	Biological Ref. Interval	Unit
Am-Fit Shubh Health			
	BIOCHEMISTR	Ŷ	
Glucose - Fasting (Fluoride Plasma - F)			
Glucose - Fasting Oxidase & Peroxidase	78.0	Normal:74-100 Pre-diabetic:100-125 Diabetic: >=126	mg/dL
HbA1c - Glycated Hemoglobin (Whole Bl	ood - EDTA)		
Glycated Hemoglobin, HbA1c	5.30	Non-diabetic range: 4.8-5.6% Prediabetic range: 5.7-6.4% Diabetes range: >=6.5%	%
Estimated Average Glucose	105.4	C C	mg/dL

Interpretation:

Note: HbA1c results may vary in situations of abnormal red cell turnover, such as pregnancy, recent blood loss or transfusion, or some anemias. In such cases only blood glucose criteria should be used to diagnose diabetes (ADA, 2014). Please correlate clinically.

LFT(Bilirubin Total, Bilirubin Conjugated, (Serum)

Bilirubin Total Diazo method	0.60	<1.1	mg/dL
Bilirubin Conjugated Diazo method	0.20	<=0.2	mg/dL
Bilirubin Unconjugated, Indirect	0.40	<1.0	mg/dL
Aspartate Aminotransferase (AST/SGOT) Kinetic IFCC	24	8 - 38	U/L
Alanine aminotransferase - (ALT / SGPT) Kinetic IFCC	25	4 - 44	U/L
Alkaline Phosphatase - ALP Kinetic IFCC	98.0	32 - 111	U/L

Interpretation:

1. In an asymptomatic patient, Non alcoholic fatty liver disease (NAFLD) is the most common cause of increased AST, ALT levels. NAFLD is considered as hepatic manifestation of metabolic syndrome.

2. In most type of liver disease, ALT activity is higher than that of AST; exception may be seen in Alcoholic Hepatitis, Hepatic Cirrhosis, and Liver neoplasia. In a patient with Chronic liver disease, AST:ALT ratio>1 is highly suggestive of advanced liver fibrosis.

3. In known cases of Chronic Liver disease due to Viral Hepatitis B & C, Alcoholic liver disease or NAFLD, Enhanced liver fibrosis (ELF) test may be used to evaluate liver fibrosis.

4. In a patient with Chronic Liver disease, AFP and Des-gamma carboxyprothrombin (DCP)/PIVKA II can be used to assess risk for development of Hepatocellular Carcinoma.

This is an electronically authenticated laboratory report.

Page 2 of 7

\$7*6 680 SA

AmPath collaborates directly with UPMC, one of the top ten hospitals in the United States according to US News & World Report.



UPMC LIFE CHANGING MEDICINE

LABORATORY REPORT



Test Name	Result	Biological Ref. Interval	Unit
Am-Fit Shubh Health			
Blood Urea Nitrogen, BUN - Serum (Serum)			
Blood Urea Nitrogen (BUN) spectrophotometry	13.18	8.0 - 23.0	mg/dL
Creatinine (Serum)			
Creatinine Modified Jaffe Kinetic	1.00	0.6 - 1.1	mg/dL
Electrolytes (Na, K, Cl) - Serum (Serum)			
Sodium - Serum Potassium Chloride - Serum	139.4 5.00 106.6	136 - 145 3.5 - 5.1 98 - 107	mmol/L mmol/L mmol/L
Calcium - Serum (Serum)			
Calcium - Serum spectrophotometry	9.00	8.4 - 10.2	mg/dL
Urea (Serum)			
Urea Kinetic, Urease	28.2	15 - 49	mg/dL
Uric acid (Serum)			
Uric acid Uricase	6.3	<mark>4.0 - 7.0</mark>	mg/dL
Protein Total, Serum (Serum)			
Protein Total, Serum Biuret Method	7.0	6.7 - 8.3	g/dL
Lipid profile (Serum)			
Cholesterol Total - Serum Enzymatic colorimetric	178.0	<200 Desirable 200-239 Boderline >240 High	mg/dL
Triglycerides Enzymatic colorimetric	132.0	Normal: <150 Borderline-: 150–199 High risk 200–499 Very high risk >500	mg/dL
Cholesterol - HDL (Direct) Enzymatic colorimetry	61.0	High Risk :<40 Low Risk :>60	mg/dL
LDL Chol, Calculated	90.60		

This is an electronically authenticated laboratory report.

Page 3 of 7

in the second second

AmPath collaborates directly with UPMC, one of the top ten hospitals in the United States according to US News & World Report.





LABORATORY REPORT



Test Name	Result	Biological Ref. Interval	Unit
Am-Fit Shubh Health			
VLDL (Very Low Density Lipoprotein) Calculation	26.4	<30	mg/dL
Cho/HDL Ratio	2.92	Normal : <4.0 Low risk : 4.0-6.0 High risk : >6.0	
LDL/HDL Ratio	1.49	Desirable/Low Risk: 0.5 - 3.0 Borderline/Moderate: 3.1 - 6.0 High Risk: >6.0	
Phosphorous Inorganic (Serum)			
Phosphorous Inorganic spectrophotometry	3.00	2.6 - 4.4	mg/dL
T3 - Total (Tri lodothyronine) (Serum)			
T3 - Total (Tri Iodothyronine) <i>CLIA</i>	1.5	0.87 - 1.78	ng/mL
T4 - Total (Thyroxine - Total) (Serum)			
T4 - Total (Thyroxine - Total) <i>CLIA</i>	8.41	5.93 - 13.29	µg/dL
Interpretation:			

Note :

Total T3 & T4 levels measure the hormone which is in the bound form and is not available to most tissues.
Severe systemic illness affects the thyroid binding proteins and can falsely alter Total T 4 levels in the absence of a primary thyroid disease. Hence Free T3 & T4 levels are recommended for accurate assessment of thyroid dysfunction.

TSH, Thyroid Stimulating Hormone (Serum)

TSH, Thyroid Stimulating Hormone 1.590 <i>CLIA</i>	0.38 - 5.33 Pregnant (Ist Trimester) 0.05 - 3.7 Pregnant(IInd Trimester) 0.31 - 4.35 Pregnant(IIIrd Trimester) 0.41 - 5.18	µIU/mL
---	--	--------

Interpretation:

The following potential sources of variation should be considered while interpreting thyroid hormone results:

1. 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. Total T3 and T4 levels are seen to have physiological rise during pregnancy and in patients on steroid treatment

This is an electronically authenticated laboratory report.

Page 4 of 7

of 7

AmPath collaborates directly with UPMC, one of the top ten hospitals in the United States according to US News & World Report





LABORATORY REPORT



Test Name	Result	Biological Ref. Interval	Unit

Am-Fit Shubh Health

3. 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 Pre-Albumin. 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. 4. T4 may be normal in the presence of hyperthyroidism under the following conditions : T3 thyrotoxicosis, Hypoproteinemia related reduced binding, in presence of 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 undetected 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 It is recommended to evaluate unbound fractions, that is free T3 (fT3) and free T4 (fT4) for clinic-pathologic correlation, as these are the metabolically active forms. Vitamin B12 (Serum) Vitamin B12 558.0 211 - 911 pg/ml CLIA Interpretation: Vitamin B12 also referred to as cobalamin is a water soluble vitamin. The uptake in the gastro intestinal track depends on intrinsic factor, which is synthesised by gastric parietal cells **Deficiency state:** Lack of intrinsic factor due to autoimmune atrophic gastritis Mal-absorption due to gastrostomy Inflammatory bowel disease Dietary deficiency (strict vegans) Vit B12 deficiency results in megaloblastic anaemia, peripheral neuropathy, dementia and depression Increased levels: VIT B12 supplement intake Polycythaemia Vera.

Vitamin D, 25-Hydroxy (Serum)

Vitamin D, 25-Hydroxy CLIA	20.2 L	Deficiency<20 Insufficiency 20-30	ng/mL
		Sufficiency 30- 100	

Interpretation:

Severe vitamin D deficiency causes rickets in children and Osteomalacia in adults. Vitamin D assay is used for monitoring vitamin D replacement therapy.

Ferritin (Serum)

Ferritin	102.00	22 - 322	ng/ml
	This is an electronically authenticated lab	boratory report.	Page 5 of 7

AmPath collaborates directly with UPMC, one of the top ten hospitals in the United States according to US News & World R

LABORATORY REPORT





NAME REFERRED BY VISIT NO AGE COLLECTED ON GENDER LAB MR# RECEIVED ON : Male OP / IP / DG # APPROVED ON REPORT STATUS : Partial Report Test Name **Biological Ref. Interval** Unit Result **Am-Fit Shubh Health** CLIA Interpretation: Ferritin is iron storage protein. Determination of ferritin is necessary in iron deficiency anemia, monitoring iron therapy and in differential diagnosis of anemia. Increased levels seen in Hemochromatosis Porphyria Rheumatoid arthrosis Leukaemia Hodgkin's lymphoma Liver disease Multiple blood transfusion Acute phase reactant Increased in all inflammatory condition **Decreased level** Iron deficiency anemia.

Iron Binding Capacity - Total (TIBC) (Serum)

Iron	157 1	65-175	ua/dl
Spectrophotometry	157.1	05-175	µg/uL
Unsaturated Iron Binding Capacity (UIBC) Direct determination with FerroZine	<mark>15</mark> 1.9	125 - 345	µg/dL
Iron Binding Capacity - Total (TIBC) Spectrophotometry	309.0	250-450	µg/dL
Transferrin Saturation Index (TSI) FerroZine Colorimetric & Calculation	50.8 H	16-45	

Result/s to Follow : URINE EXAMINATION - ROUTINE & MICROSCOPY (CUE)





Disclaimer:

1. All results released pertain to the specimen as received by the lab for testing and under the assumption that the patient indicated or identified on the bill/test requisition form is the owner of the specimen. 2. Clinical details and consent forms, especially in Genetic testing, histopathology, as well as wherever applicable, are

mandatory to be accompanied with the test requisition form. The non-availability of such information may lead to delay in This is an electronically authenticated laboratory report.

Page 6 of 7

AmPath collaborates directly with UPMC, one of the top ten hospitals in the United States according to US News & World Rep





LABORATORY REPORT



Test Name	Result	Biological Ref. Interval	Unit

Am-Fit Shubh Health

reporting as well as misinterpretation of test results. The lab will not be responsible for any such delays or misinterpretations thereof.

3. Test results are dependent on the quality of the sample received by the lab. In case the samples are preprocessed elsewhere (e.g., paraffin blocks), results may be compromised.

4. Tests are performed as per the schedule given in the test listing and in any unforeseen circumstances, report delivery may be affected.

5. Test results may show inter-laboratory as well as intra-laboratory variations as per the acceptable norms.

6. Genetic reports as well as reports of other tests should be correlated with clinical details and other available test reports by a qualified medical practitioner. Genetic counselling is advised in genetic test reports by a qualified genetic counsellor, medical practitioner or both.

7. Samples will be discarded post processing after a specified period as per the laboratory's retention policy. Kindly get in touch with the lab for more information.

8. If accidental damage, loss, or destruction of the specimen is not attributable to any direct or negligent act or omission on the part of Ampath Labs or its employees, Ampath shall in no event be liable. Ampath lab's liability for a lack of services, or other mistakes and omissions, shall be restricted to the amount of the patient's payment for the pertinent laboratory services.

This is an electronically authenticated laboratory report.





AmPath collaborates directly with UPMC, one of the top ten hospitals in the United States according to US News & World Report