

REPORT

Name	: Mr. M V SHIVA KUMAR	Sample ID	: A0590355
Age/Gender	: 28 Years/Male	Reg. No	: 0312408050032
Referred by	: Dr. N KAPIL C	SPP Code	: SPL-CV-172
Referring Customer	: V CARE MEDICAL DIAGNOSTICS	Collected On	: 05-Aug-2024 02:18 PM
Primary Sample	: Whole Blood	Received On	: 05-Aug-2024 04:48 PM
Sample Tested In	: Serum	Reported On	: 06-Aug-2024 08:29 PM
Client Address	: Kimtee colony ,Gokul Nagar,Tarnaka	Report Status	: Final Report

CLINICAL BIOCHEMISTRY

Test Name	Results	Units	Ref. Range	Method
PRL(Prolactin)	6.91	ng/mL	Refer Table	CLIA

Interpretation:

Age	Reference Range: Male (ng/mL)	Reference Range: Female(ng/mL)
Puberty Tanner Stage		
1	< 10.0	3.6-12.0
2-3	< 6.1	2.6-18.0
4-5	2.8-11.0	3.2-20.0
Adult	2.1-17.7	Nonpregnant :2.8-29.2 Pregnant :9.7-208.5 Postmenopausal :1.8-20.3

- Prolactin is a 23kD sized hormone produced by the lactotroph cells of the pituitary gland, a grape-sized organ found at the base of the brain. Normally present in low amounts in men and non-pregnant women, prolactin's main role is to promote lactation (breast milk production).
- Breast milk production that is not related to childbirth (galactorrhea)
- Erection problems in men
- Irregular or no menstrual periods (amenorrhea)



Vaishnavi
DR.VAISHNAVI
MD BIOCHEMISTRY

REPORT

Name	: Mr. M V SHIVA KUMAR	Sample ID	: A0590355
Age/Gender	: 28 Years/Male	Reg. No	: 0312408050032
Referred by	: Dr. N KAPIL C	SPP Code	: SPL-CV-172
Referring Customer	: V CARE MEDICAL DIAGNOSTICS	Collected On	: 05-Aug-2024 02:18 PM
Primary Sample	: Whole Blood	Received On	: 05-Aug-2024 04:48 PM
Sample Tested In	: Serum	Reported On	: 06-Aug-2024 08:29 PM
Client Address	: Kimtee colony ,Gokul Nagar,Tarnaka	Report Status	: Final Report

CLINICAL BIOCHEMISTRY

Test Name	Results	Units	Ref. Range	Method
25 Hydroxy Vitamin D2 and D3				
25 Hydroxy VIT D2 Ergocalciferol	1.52	ng/mL	Specific reference range for LCMS Vitamin D2 is not available.	
25 Hydroxy VIT D3 Cholecalciferol	13.22	ng/mL	Specific reference range for LCMS Vitamin D3 is not available.	
25 - Hydroxy Vitamin D	14.74	ng/mL	<20.0-Deficiency 20.0-30.0-Insufficiency 30.0-100.0-Sufficiency >100.0-Potential Intoxication	CLIA

VALUE	CONDITION	INFERENCE
< 10	SEVERE DEFICIENCY	Could be associated with osteomalacia or rickets
10 - 19	MILD DEFICIENCY	May be associated with increased risk of osteoporosis or secondary hyperparathyroidism
20 - 50	OPTIMUM LEVELS	Optimum levels in the healthy population; patients with bone disease may benefit from higher levels within this range
51 - 80	INCREASED Risk of hypercalciuria	Sustained levels >50 ng/mL 25OH-VitD along with prolonged calcium supplementation may lead to hypercalciuria and decreased renal function
>80	TOXICITY POSSIBLE	80 ng/mL is the lowest reported level associated with toxicity in patients without primary hyperparathyroidism who have normal renal function. Most patients with toxicity have levels > 150 ng/mL. Patients with renal failure can have very high 25-OH-VitD levels without any signs of toxicity, as renal conversion to the active hormone 1, 25-OH-VitD is impaired or absent.

These reference ranges represent clinical decision values, based on the 2011 Institute of Medicine report, that apply to males and females of all ages, rather than population-based reference values. Population reference ranges for 25-OH-VitD vary widely depending on ethnic background, age, geographic location of the studied populations, and the sampling season

Method : LCMS

Result rechecked and verified for abnormal cases

*** End Of Report ***



Dr. Vaishnavi
DR. VAISHNAVI
MD BIOCHEMISTRY

REPORT

Name	: Mr. M V SHIVA KUMAR	Sample ID	: A0590356
Age/Gender	: 28 Years/Male	Reg. No	: 0312408050032
Referred by	: Dr. N KAPIL C	SPP Code	: SPL-CV-172
Referring Customer	: V CARE MEDICAL DIAGNOSTICS	Collected On	: 05-Aug-2024 02:18 PM
Primary Sample	: Whole Blood	Received On	: 05-Aug-2024 04:35 PM
Sample Tested In	: Whole Blood EDTA	Reported On	: 05-Aug-2024 05:57 PM
Client Address	: Kimtee colony ,Gokul Nagar,Tarnaka	Report Status	: Final Report

HAEMATOLOGY

Test Name	Results	Units	Ref. Range	Method
Complete Blood Picture(CBP)				
Haemoglobin (Hb)	15.6	g/dL	13-17	Cynmeth Method
Haematocrit (HCT)	47.7	%	40-50	Calculated
RBC Count	5.73	10 ¹² /L	4.5-5.5	Cell Impedence
MCV	83	fl	81-101	Calculated
MCH	27.1	pg	27-32	Calculated
MCHC	32.6	g/dL	32.5-34.5	Calculated
RDW-CV	13.4	%	11.6-14.0	Calculated
Platelet Count (PLT)	287	10 ⁹ /L	150-410	Cell Impedence
Total WBC Count	7.3	10 ⁹ /L	4.0-10.0	Impedence
Differential Leucocyte Count (DC)				
Neutrophils	64	%	40-70	Cell Impedence
Lymphocytes	30	%	20-40	Cell Impedence
Monocytes	04	%	2-10	Microscopy
Eosinophils	02	%	1-6	Microscopy
Basophils	00	%	1-2	Microscopy
Absolute Neutrophils Count	4.67	10 ⁹ /L	2.0-7.0	Impedence
Absolute Lymphocyte Count	2.19	10 ⁹ /L	1.0-3.0	Impedence
Absolute Monocyte Count	0.29	10 ⁹ /L	0.2-1.0	Calculated
Absolute Eosinophils Count	0.15	10 ⁹ /L	0.02-0.5	Calculated
Absolute Basophil ICount	0.00	10 ⁹ /L	0.0-0.3	Calculated
Morphology	Normocytic normochromic			PAPs Staining



Swarnabala - M
DR.SWARNA BALA
MD PATHOLOGY

REPORT

Name	: Mr. M V SHIVA KUMAR	Sample ID	: A0590352, A0590355
Age/Gender	: 28 Years/Male	Reg. No	: 0312408050032
Referred by	: Dr. N KAPIL C	SPP Code	: SPL-CV-172
Referring Customer	: V CARE MEDICAL DIAGNOSTICS	Collected On	: 05-Aug-2024 02:18 PM
Primary Sample	: Whole Blood	Received On	: 05-Aug-2024 04:48 PM
Sample Tested In	: Plasma-NaF(R), Serum	Reported On	: 05-Aug-2024 05:37 PM
Client Address	: Kimtee colony ,Gokul Nagar,Tarnaka	Report Status	: Final Report

CLINICAL BIOCHEMISTRY

Test Name	Results	Units	Ref. Range	Method
Glucose Random (RBS)	81	mg/dL	70-140	Hexokinase (HK)

Interpretation of Plasma Glucose based on ADA guidelines 2018

Diagnosis	Fasting Plasma Glucose(mg/dL)	2hrs Plasma Glucose(mg/dL)	HbA1c(%)	RBS(mg/dL)
Prediabetes	100-125	140-199	5.7-6.4	NA
Diabetes	> = 126	> = 200	> = 6.5	>=200(with symptoms)

Reference: Diabetes care 2018:41(suppl.1):S13-S27

- The random blood glucose if it is above 200 mg/dL and the patient has increased thirst, polyuria, and polyphagia, suggests diabetes mellitus.
- As a rule, two-hour glucose samples will reach the fasting level or it will be in the normal range.

Uric Acid	4.9	mg/dL	3.5-7.2	Uricase
------------------	-----	-------	---------	---------

Interpretation:

- Uric acid is a chemical created when the body breaks down substances called purines. Purines are normally produced in the body and are also found in some foods and drinks. Foods with high content of purines include liver, anchovies, mackerel, dried beans and peas, and beer. Most uric acid dissolves in blood and travels to the kidneys. From there, it passes out in urine. If your body produces too much uric acid or does not remove enough of it, you can get sick. A high level of uric acid in the blood is called hyperuricemia. This test checks to see how much uric acid you have in your blood. Investigation and monitoring of inflammatory arthritis pain, particularly in big toe (gout)
- Useful in the investigation of kidney stones
- Aid in diagnosis, treatment, and monitoring of renal failure/disease
- Monitor patients receiving cytotoxic drugs (high nucleic acid turnover)
- Monitor diseases with nucleic acid metabolism and turnover (eg, leukemia, lymphoma, polycythemia)



Dr. Vaishnavi
DR. VAISHNAVI
MD BIOCHEMISTRY

REPORT

Name	: Mr. M V SHIVA KUMAR	Sample ID	: A0590352, A0590355
Age/Gender	: 28 Years/Male	Reg. No	: 0312408050032
Referred by	: Dr. N KAPIL C	SPP Code	: SPL-CV-172
Referring Customer	: V CARE MEDICAL DIAGNOSTICS	Collected On	: 05-Aug-2024 02:18 PM
Primary Sample	: Whole Blood	Received On	: 05-Aug-2024 04:48 PM
Sample Tested In	: Plasma-NaF(R), Serum	Reported On	: 05-Aug-2024 05:37 PM
Client Address	: Kimtee colony , Gokul Nagar, Tarnaka	Report Status	: Final Report

CLINICAL BIOCHEMISTRY

Test Name	Results	Units	Ref. Range	Method
Vitamin- B12 (cyanocobalamin)	227	pg/mL	211-911	CLIA

Interpretation:

This test is most often done when other blood tests suggest a condition called megaloblastic anemia. Pernicious anemia is a form of megaloblastic anemia caused by poor vitamin B12 absorption. This can occur when the stomach makes less of the substance the body needs to properly absorb vitamin B12.

Causes of vitamin B12 deficiency include: Diseases that cause malabsorption

- Lack of intrinsic factor, a protein that helps the intestine absorb vitamin B12
- Above normal heat production (for example, with hyperthyroidism)

An increased vitamin B12 level is uncommon in:

- Liver disease (such as cirrhosis or hepatitis)
- Myeloproliferative disorders (for example, polycythemia vera and chronic myelogenous leukemia)
-

TSH -Thyroid Stimulating Hormone	1.27	µIU/mL	0.35-5.5	CLIA
---	------	--------	----------	------

Pregnancy & Cord Blood

TSH (Thyroid Stimulating Hormone (µIU/mL))	
First Trimester	: 0.24-2.99
Second Trimester	: 0.46-2.95
Third Trimester	: 0.43-2.78
Cord Blood	: 2.3-13.2

- TSH is synthesized and secreted by the anterior pituitary in response to a negative feedback mechanism involving concentrations of FT3 (free T3) and FT4 (free T4). Additionally, the hypothalamic tripeptide, thyrotropin-releasing hormone (TRH), directly stimulates TSH production.
- TSH interacts with specific cell receptors on the thyroid cell surface and exerts two main actions. The first action is to stimulate cell reproduction and hypertrophy. Secondly, TSH stimulates the thyroid gland to synthesize and secrete T3 and T4
- The ability to quantitate circulating levels of TSH is important in evaluating thyroid function. It is especially useful in the differential diagnosis of primary (thyroid) from secondary (pituitary) and tertiary (hypothalamus) hypothyroidism. In primary hypothyroidism, TSH levels are significantly elevated, while in secondary and tertiary hypothyroidism, TSH levels are low
- TRH stimulation differentiates secondary and tertiary hypothyroidism by observing the change in patient TSH levels. Typically, the TSH response to TRH stimulation is absent in cases of secondary hypothyroidism, and normal to exaggerated in tertiary hypothyroidism
- Historically, TRH stimulation has been used to confirm primary hyperthyroidism, indicated by elevated T3 and T4 levels and low or undetectable TSH levels. TSH assays with increased sensitivity and specificity provide a primary diagnostic tool to differentiate hyperthyroid from euthyroid patients.

Correlate Clinically.

Result rechecked and verified for abnormal cases

Laboratory is NABL Accredited

*** End Of Report ***



Dr. Vaishnavi
DR. VAISHNAVI
MD BIOCHEMISTRY