

**PHYSICAL EXAMINATION**

CLIENT NAME : Mr. Shaji Thomas	DATE : 27/09/2024
CID : 2427119159	AGE/GENDER : 55/Male

History and Complaints : Nil

**EXAMINATION FINDINGS :**

Height (cms) : 163	Weight (kg) : 65
Temp (oc) : Afebrile	Skin : (N)
Blood Pressure (mm/hg) : 138/88	Nails : (N)
Pulse : 62/min	Lymph Node : N.P

System	
Cardiovascular :	S1S2 audible, no murmurs
Respiratory :	Lungs clear, no Added sound
Genitourinary:	normal
GI System :	normal
CNS :	normal

IMPRESSION : cholestrol - 203.7, HDLC - 160.4, LDLC - 138.4  
 ch/HDL - 4.07, Bil (Total) - 1.35, Bil (D) - 0.40,  
 2D Echo - moderate LV systolic dysfunction, LVEF = 30%  
 Dilated LA, LV, LV Hypertrophy, mild MR, TR+, Mild PHT  
 Type 2 LVDD, USG abd -> Report attached.

ADVICE : consult MD. physician in view of above findings

CHIEF COMPLAINTS		
1	Hypertension	no
2	IHD	no
3	Arrhythmia	no
4	Diabetes Mellitus	no


5	Tuberculosis	NO
6	Asthama	NO
7	Pulmonary Disease	NO
8	Thyroid / Endocrine disorders	NO
9	Nervous disorders	NO
10	GI system	h/o piles.
11	Genital urinary disorder	NO
12	Rheumatic joint disorder or symptoms	NO
13	Blood disease or disorder	NO
14	Cancer/Lump growth/Cyst	NO
15	Congenital disease	NO
16	Surgeries	Nil
17	Musculoskeletal System	NO

PERSONAL HISTORY		
1	Alcohol	once a wk Beer x many yrs
2	Smoking	2-3 cig/day x 10-15y stop since 2017.
3	Diet	Mixed.
4	Medication	Nil

*Rafat M Parkar*  
**Dr. Rafat M Parkar**  
M.B.B.S.  
Regn. No. 072366

**Suburban Diagnostics (I) Pvt. Ltd.**  
6th Floor, Gupte House  
81, S.V. Road, Khar (W), Mumbai - 400 052.  
Tel.: 26484850 / 26484807

 **भारत सरकार**  
**GOVERNMENT OF INDIA**

 **शाजी थोमस कुरियन**  
**Shaji Thomas Kurian**

:  
:

**जन्म वर्ष / Year of Birth : 1968**  
**पुरुष / Male**

**7389 5413 3784**

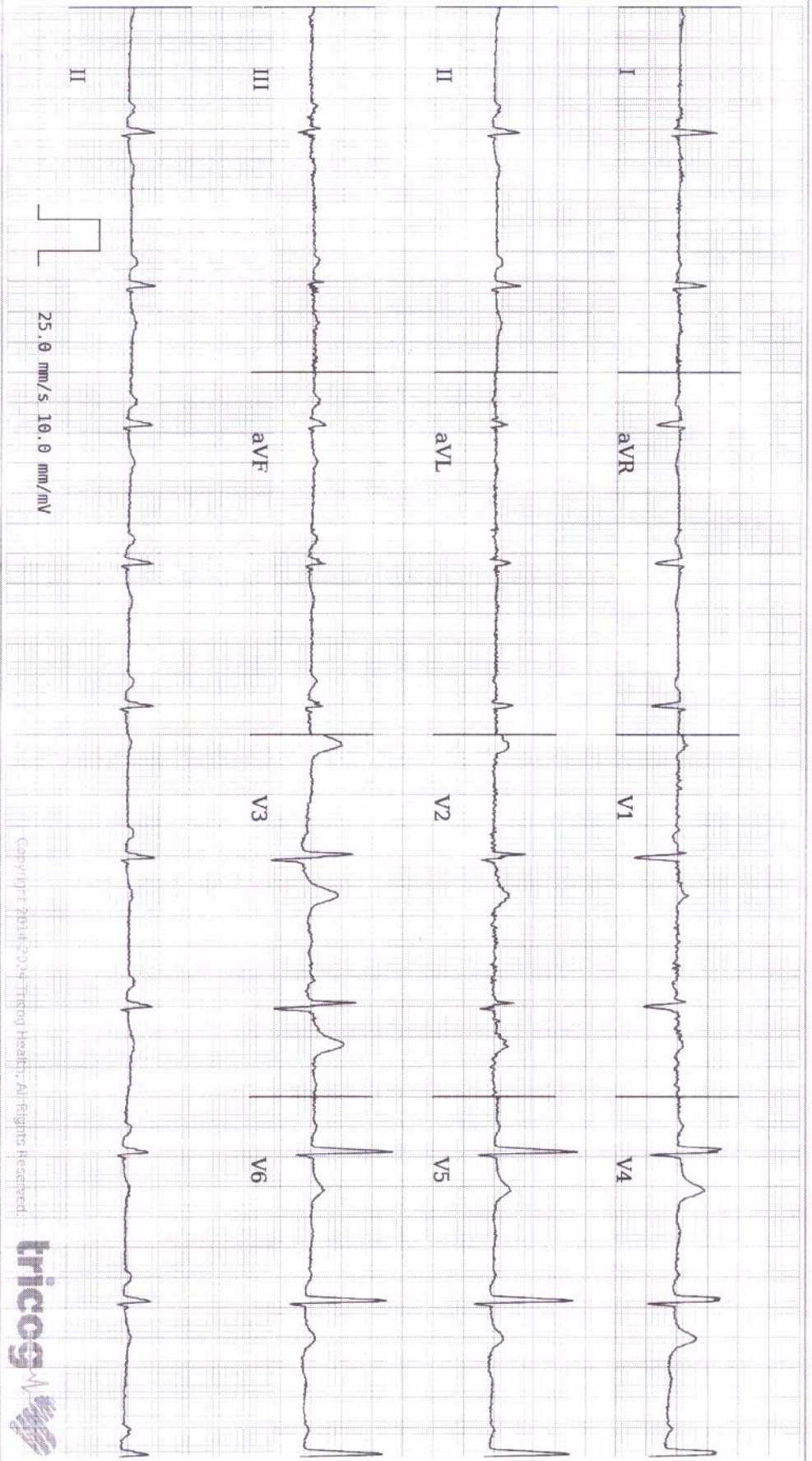
 

**आधार – आम आदमी का अधिकार**



  
**Dr. Rafat M Parkar**  
M.B.B.S.  
Regn. No. 072366

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Age 55 NA NA  
years months days

Gender Male

Heart Rate 62bpm

Patient Vitals

BP: 138/88 mmHg

Weight: 65 kg

Height: 163 cm

Pulse: NA

SpO2: NA

Resp: NA

Others:

Measurements

QRSD: 84ms

QT: 400ms

QTcB: 406ms

PR: 162ms

P-R-T: 81° 28' 47°

ECG Within Normal Limits: Sinus Rhythm. Please correlate clinically.

REPORTED BY

*Dr. Sonali Honrao*

DR SONALI HONRAO  
MD ( General Medicine)  
Physician  
2001/04/1882

Disclaimer: 1) Analysis in this report is based on ECG alone and should be used as an adjunct to clinical history, symptoms, and results of other invasive and non-invasive tests and must be interpreted by a qualified physician. 2) Patient vitals are as entered by the clinician and not derived from the ECG.

Date:- 27/09/2024

CID: 2427119159

Name:- Mr. Shaji Thomas

Sex / Age: M / 55y.

**EYE CHECK UP**

Chief complaints: Nil

Systemic Diseases: Nil

Past history: Nil

Unaided Vision: → N.V. = N5 (Bil) → RT N5  
 → L N5

Aided Vision: → D.V. = 6/5 (Bil) → RT 6/5  
 → L 6/5

Refraction:

(Right Eye)

(Left Eye)

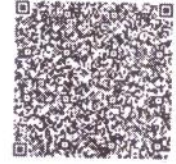
	Sph	Cyl	Axis	Vn	Sph	Cyl	Axis	Vn
Distance	_____	_____	_____	6/5	_____	_____	_____	6/5
Near	_____	_____	_____	N5	_____	_____	_____	N5

Colour Vision: Normal / Abnormal

Remark: Nil

*R Parkar*  
**Dr. Rafat M Parkar**  
 M.B.B.S.  
 Regn. No. 072366

Authenticity Check



Use a QR Code Scanner  
Application To Scan the Code

CID : 2427119159  
Name : Mr Shaji Thomas Kurian  
Age / Sex : 55 Years/Male  
Ref. Dr :  
Reg. Location : Khar West Main Centre

Reg. Date : 27-Sep-2024  
Reported : 27-Sept-2024 / 16:01

### X-RAY CHEST PA VIEW

Both lung fields are clear.

Both costo-phrenic angles are clear.

The cardiac size is within normal limits.

The domes of diaphragm are normal in position and outlines.

The visualized bony thorax appears normal.

#### IMPRESSION:

**NO SIGNIFICANT ABNORMALITY IS DETECTED.**

**SUGGEST CLINICAL CORRELATION.**

-----End of Report-----

Dr. Vishal Kumar Mulchandani  
MD DMRE  
REG No : 2006/03/1660  
Consultant Radiologist

Click here to view images <http://3.111.232.119/iRISViewer/NeoradViewer?AccessionNo=2024092710093629>

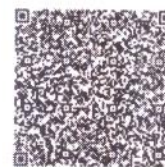
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HEALTHLINE: 022-61700000 | E-MAIL: customerservice@suburbandiagnosics.com | WEBSITE: www.suburbandiagnosics.com

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Ref. Dr :  
Reg. Location : Khar West Main Centre

Reg. Date : 27-Sep-2024  
Reported : 28-Sept-2024 / 9:10

### USG WHOLE ABDOMEN

**LIVER:** Liver is normal in size (measures 13.3 cm). **Liver appears minimally bright in echotexture.** There is no intra-hepatic biliary radical dilatation. No evidence of focal lesion in liver at present scan.

**GALL BLADDER:** Gall bladder is distended. **Minimal sludge is noted in gallbladder lumen.** Wall thickness is within normal limits.

**PORTAL VEIN:** Portal vein is normal. **CBD:** CBD appears normal.

**PANCREAS:** Part of body of pancreas is visualized, appears normal in echotexture. Rest of pancreas is obscured by bowel gases.

**KIDNEYS:** Both kidneys are normal in size and echotexture. Corticomedullary differentiation is maintained.

Right kidney measures 10.2 x 4.3 cm.

**Approx. 17 x 14 mm simple cyst is noted at lower pole of right kidney.**

Left kidney measures 10.2 x 5.3 cm. **Small concretion is noted at mid pole of left kidney.**

**SPLEEN:** Spleen is normal in size (measures 8.9 cm) and echotexture. No focal lesion is seen.

**URINARY BLADDER:** Urinary bladder is distended. Wall thickness is within normal limits.

Prevoid volume measures - 582 cc, Postvoid residue measures - 20 cc(**insignificant**)

**PROSTATE:** Prostate is normal in size and measures 5.1 x 3.2 x 2.9 cm and prostatic volume is 24.5 cc. **Few small prostatic hyperechoic calcifications are noted.**

No free fluid or significant abdominal lymphadenopathy is noted at present scan.

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**IMPRESSION:**

- Early fatty changes in liver parenchyma.
- Minimal sludge is noted in gallbladder lumen.
- Simple right renal cyst.
- Insignificant postvoid residue.

**Suggest clinicopathological correlation.**

*Note:* Investigations have their limitations. Solitary radiological investigations never confirm the final diagnosis. They only help in diagnosing the disease in correlation to clinical symptoms and other related tests. USG is known to have inter-observer variations. Further/Follow-up imaging may be needed in some cases for confirmation/exclusion of diagnosis. Patient was explain in detail verbally about the USG findings, USG measurements and its limitations. In case of any typographical error in the report, patient is requested to immediately contact the center for rectification. Please interpret accordingly. of diagnosis. Patient was explain in detail verbally about the USG findings, USG measurements and its limitations. In case of any typographical error in the report, patient is requested to immediately contact the center for rectification. Please interpret accordingly.

-----End of Report-----

**Dr. Vishal Kumar Mulchandani**  
MD DMRE  
REG No : 2006/03/1660  
Consultant Radiologist

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Reported : 27-Sept-2024 / 16:09

## 2D-ECHOCARDIOGRAPHY REPORT

No thinning / scarring / dyskinesia of LV wall noted.  
Moderate LV systolic dysfunction. LVEF = 30%.  
LV Hypokinesia  
Good RV function.

Structurally Normal MV/ TV / PV./AV

RA / RV Normal in dimension.  
Dilated LA,LV  
IAS / IVS is Intact.

Type 2 Left Ventricular Diastolic Dysfunction [ LVDD].

No e/o thrombus in LA /LV.  
No e/o Pericardial effusion.

IVC normal in dimension and good inspiratory collapse.

### IMPRESSION:

**MODERATE LV SYSTOLIC DYSFUNCTION, LVEF= 30 %**  
**DILATED LA,LV**  
**LV HYPOKINESIA .**  
**ALL VALVES NORMAL**  
**MILD MR,TR+**  
**MILD PAH,PASP=40mmHg**  
**TYPE 2 LVDD.**  
**IVC NORMAL**

Click here to view images <http://3.111.232.119/iRISViewer/NeoradViewer?AccessionNo=2024092710093645>

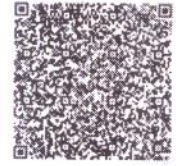
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**Reported** : 27-Sept-2024 / 16:09

LV STUDY	Value	Unit	COLOUR DOPPLER STUDY	Value	Unit
IVSd	10	mm	Mitral Valve E velocity	0.80	cm/s
LVIDd	56	mm	Mitral Valve A velocity	0.5	cm/s
LVPWd	10	mm	E/A Ratio	>1	-
IVSs	16	mm	Mitral Valve Deceleration Time	120	ms
LVIDs	40	mm	Med E' vel	--	cm/s
LVPWs	15	mm	E/E'	14	-
LA /AO	N	--	Aortic valve		
			AVmax	1.4	cm/s
			AV Peak Gradient	6	mmHg
<b>2D STUDY</b>			<b>LVOT Vmax</b>	1.2	cm/s
LVOT	20	mm	LVOT gradient	4	mmHg
LA	40	mm	Pulmonary Valve		
RA	28	mm	PVmax	--	cm/s
RV [RVID]	24	mm	PV Peak Gradient	--	mmHg
IVC	14	mm	Tricuspid Valve		
			TR jet vel.	3.6	cm/s
			PASP	40	mmHg

Disclaimer: 2D echocardiography is an observer dependent investigation. Minor variations in report are possible when done by two different examiners or even by same examiner on two different occasions. These variations may not necessarily indicate a change in the underlying cardiac condition. In the event of previous reports being available, these must be provided to improve clinical correlation.

-----End of Report-----

**DR. DINESH ROHIRA**  
 DNB MEDICINE  
 ECHO CARDIOLOGIST  
 REG. No. 2008/04/0837

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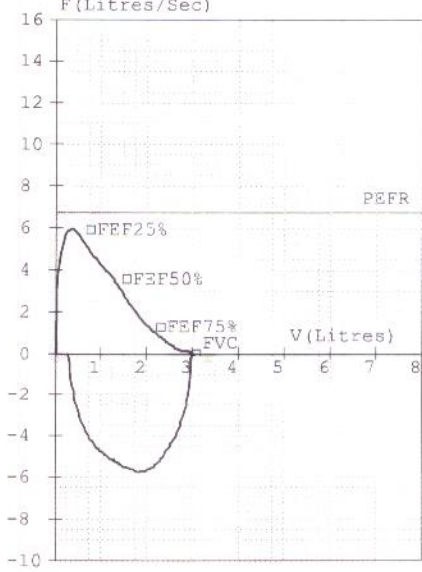
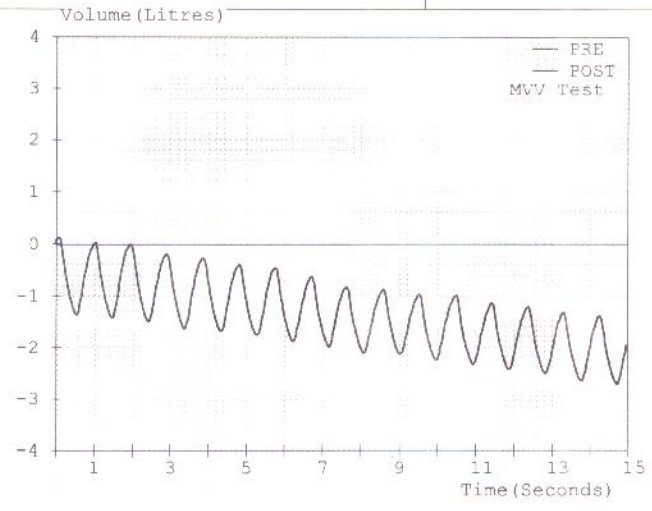
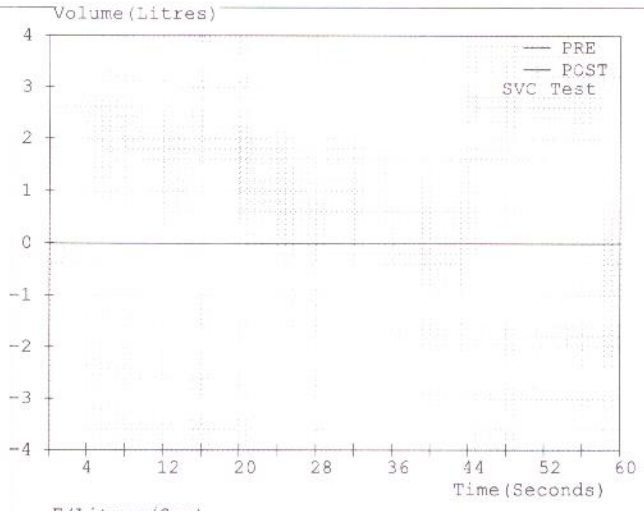
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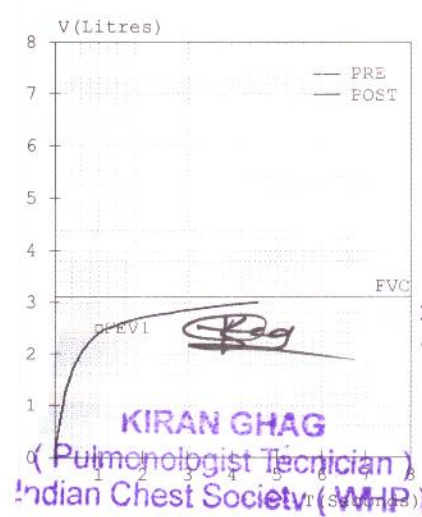
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**SUBURBAN DIAGNOSTICS CENTER**  
NEAR GUPTA HOUSE, KHAR ROAD (WEST).

Patient: MR SHAJI THOMAS KURIAN    Age : 55 Years    Gender : Male  
 Refd. By:    Height : 162 Cms    Smoker : No  
 Pred.Eqns: ERS 93    Weight : 65 Kgs    Eth. Corr: 87  
 Date : 27-Sep-2024 11:12 AM    ID: 78548129    Temp :



Spirometry Results							
Parameter		Pred	M.Pre	%Pred	M.Post	%Pred	%Imp
FVC	(L)	03.10	03.01	097	---	---	---
FEV1	(L)	02.51	02.40	096	---	---	---
FEV1/FVC	(%)	80.97	79.73	098	---	---	---
FEF25-75	(L/s)	03.03	02.17	072	---	---	---
PEFR	(L/s)	06.73	05.88	087	---	---	---
FIVC	(L)	03.21	02.74	085	---	---	---
FEV.5	(L)	---	01.87	---	---	---	---
FEV3	(L)	---	02.87	---	---	---	---
PIFR	(L/s)	---	05.68	---	---	---	---
PEF75-85	(L/s)	---	00.60	---	---	---	---
FEF.2-1.2	(L/s)	---	04.83	---	---	---	---
FEF 25%	(L/s)	05.90	04.87	083	---	---	---
FEF 50%	(L/s)	03.55	02.79	079	---	---	---
FEF 75%	(L/s)	01.27	00.90	071	---	---	---
FEV.5/FVC	(%)	---	62.13	---	---	---	---
FEV3/FVC	(%)	---	95.35	---	---	---	---
FET	(Sec)	---	04.59	---	---	---	---
ExpTime	(Sec)	---	00.06	---	---	---	---
Lung Age	(Yrs)	055	057	104	---	---	---
FEV6	(L)	03.10	---	---	---	---	---
FIF 25%	(L/s)	---	04.07	---	---	---	---
FIF 50%	(L/s)	---	05.65	---	---	---	---
FIF 75%	(L/s)	---	05.09	---	---	---	---
SVC	(L)	---	---	---	---	---	---
ERV	(L)	00.95	---	---	---	---	---
IRV	(L)	---	---	---	---	---	---
VE	(L/min)	---	---	---	---	---	---
Rf	(l/min)	---	---	---	---	---	---
Ti	(sec)	---	---	---	---	---	---
Te	(sec)	---	---	---	---	---	---
VT	(L)	---	---	---	---	---	---
VT/Ti		---	---	---	---	---	---
Ti/Ttot		---	---	---	---	---	---
IC	(L)	---	---	---	---	---	---
MVV	(L/min)	096	087	091	---	---	---
MRf	(l/min)	---	66.11	---	---	---	---
MVT	(L)	---	01.32	---	---	---	---



**Doctor's Notes**  
SPIROMETRY TEST IS WITHIN NORMAL LIMITS.

4  
*[Signature]*

**KIRAN GHAG**  
(Pulmonologist Technician)  
Indian Chest Society (WIP)





CID : 2427119159  
Name : MR.SHAJI THOMAS KURIAN  
Age / Gender : 55 Years / Male  
Consulting Dr. : -  
Reg. Location : Khar West (Main Centre)

Collected : 27-Sep-2024 / 10:14  
Reported : 27-Sep-2024 / 13:28

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**MEDIWHEEL FULL BODY HEALTH CHECKUP MALE ABOVE 40/2D ECHO**

**CBC (Complete Blood Count), Blood**

<u>PARAMETER</u>	<u>RESULTS</u>	<u>BIOLOGICAL REF RANGE</u>	<u>METHOD</u>
<b><u>RBC PARAMETERS</u></b>			
Haemoglobin	16.2	13.0-17.0 g/dL	Spectrophotometric
RBC	5.26	4.5-5.5 mil/cmm	Elect. Impedance
PCV	48.4	40-50 %	Calculated
MCV	91.9	81-101 fl	Measured
MCH	30.7	27-32 pg	Calculated
MCHC	33.4	31.5-34.5 g/dL	Calculated
RDW	14.3	11.6-14.0 %	Calculated
<b><u>WBC PARAMETERS</u></b>			
WBC Total Count	6310	4000-10000 /cmm	Elect. Impedance
<b><u>WBC DIFFERENTIAL AND ABSOLUTE COUNTS</u></b>			
Lymphocytes	22.3	20-40 %	
Absolute Lymphocytes	1410.0	1000-3000 /cmm	Calculated
Monocytes	7.4	2-10 %	
Absolute Monocytes	470.0	200-1000 /cmm	Calculated
Neutrophils	68.1	40-80 %	
Absolute Neutrophils	4290.0	2000-7000 /cmm	Calculated
Eosinophils	1.8	1-6 %	
Absolute Eosinophils	110.0	20-500 /cmm	Calculated
Basophils	0.4	0.1-2 %	
Absolute Basophils	30.0	20-100 /cmm	Calculated
Immature Leukocytes	-		
WBC Differential Count by Absorbance & Impedance method/Microscopy.			
<b><u>PLATELET PARAMETERS</u></b>			
Platelet Count	209000	150000-410000 /cmm	Elect. Impedance
MPV	8.8	6-11 fl	Measured
PDW	16.2	11-18 %	Calculated
<b><u>RBC MORPHOLOGY</u></b>			
Hypochromia	-		
Microcytosis	-		



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Macrocytosis	-
Anisocytosis	-
Poikilocytosis	-
Polychromasia	-
Target Cells	-
Basophilic Stippling	-
Normoblasts	-
Others	Normocytic, Normochromic
WBC MORPHOLOGY	-
PLATELET MORPHOLOGY	-
COMMENT	-

Specimen: EDTA Whole Blood

ESR, EDTA WB-ESR 6 2-20 mm at 1 hr. Sedimentation

**Clinical Significance:** The erythrocyte sedimentation rate (ESR), also called a sedimentation rate is the rate red blood cells sediment in a period of time.

**Interpretation:**

Factors that increase ESR: Old age, Pregnancy, Anemia

Factors that decrease ESR: Extreme leukocytosis, Polycythemia, Red cell abnormalities- Sickle cell disease

**Limitations:**

- It is a non-specific measure of inflammation.
- The use of the ESR as a screening test in asymptomatic persons is limited by its low sensitivity and specificity.

**Reflex Test:** C-Reactive Protein (CRP) is the recommended test in acute inflammatory conditions.

**Reference:**

- Pack Insert
- Brigden ML. Clinical utility of the erythrocyte sedimentation rate. American family physician. 1999 Oct 1;60(5):1443-50.

\*Sample processed at SUBURBAN DIAGNOSTICS (INDIA) PVT. LTD SDRL, Vidyavihar Lab

\*\*\* End Of Report \*\*\*



**Dr. ANUPA DIXIT**  
**M.D.(PATH)**  
**Consultant Pathologist & Lab Director**



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Age / Gender : 55 Years / Male  
Consulting Dr. : -  
Reg. Location : Khar West (Main Centre)

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Collected : 27-Sep-2024 / 15:43  
Reported : 27-Sep-2024 / 18:24

**MEDIWHEEL FULL BODY HEALTH CHECKUP MALE ABOVE 40/2D ECHO**

PARAMETER	RESULTS	BIOLOGICAL REF RANGE	METHOD
GLUCOSE (SUGAR) FASTING, Fluoride Plasma Fasting	77.6	Non-Diabetic: < 100 mg/dl Impaired Fasting Glucose: 100-125 mg/dl Diabetic: >/= 126 mg/dl	Hexokinase
GLUCOSE (SUGAR) PP, Fluoride Plasma PP	77.2	Non-Diabetic: < 140 mg/dl Impaired Glucose Tolerance: 140-199 mg/dl Diabetic: >/= 200 mg/dl	Hexokinase

\*Sample processed at SUBURBAN DIAGNOSTICS (INDIA) PVT. LTD SDRL, Vidyavihar Lab  
\*\*\* End Of Report \*\*\*



*Anupa*

**Dr. ANUPA DIXIT**  
M.D.(PATH)  
Consultant Pathologist & Lab Director



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Reported : 27-Sep-2024 / 16:16

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**MEDIWHEEL FULL BODY HEALTH CHECKUP MALE ABOVE 40/2D ECHO**  
**KIDNEY FUNCTION TESTS**

PARAMETER	RESULTS	BIOLOGICAL REF RANGE	METHOD
BLOOD UREA, Serum	22.6	19.29-49.28 mg/dl	Calculated
BUN, Serum	10.6	9.0-23.0 mg/dl	Urease with GLDH
CREATININE, Serum	0.95	0.73-1.18 mg/dl	Enzymatic
eGFR, Serum	95	(ml/min/1.73sqm) Normal or High: Above 90 Mild decrease: 60-89 Mild to moderate decrease: 45-59 Moderate to severe decrease: 30-44 Severe decrease: 15-29 Kidney failure: <15	Calculated

Note: eGFR estimation is calculated using 2021 CKD-EPI GFR equation

TOTAL PROTEINS, Serum	7.0	5.7-8.2 g/dL	Biuret
ALBUMIN, Serum	4.4	3.2-4.8 g/dL	BCG
GLOBULIN, Serum	2.6	2.3-3.5 g/dL	Calculated
A/G RATIO, Serum	1.7	1 - 2	Calculated
URIC ACID, Serum	5.0	3.7-9.2 mg/dl	Uricase/ Peroxidase
PHOSPHORUS, Serum	3.2	2.4-5.1 mg/dl	Phosphomolybdate
CALCIUM, Serum	9.7	8.7-10.4 mg/dl	Arsenazo
SODIUM, Serum	141	136-145 mmol/l	IMT
POTASSIUM, Serum	4.3	3.5-5.1 mmol/l	IMT
CHLORIDE, Serum	108	98-107 mmol/l	IMT

\*Sample processed at SUBURBAN DIAGNOSTICS (INDIA) PVT. LTD SDRL, Vidyavihar Lab  
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Consulting Dr. : -  
Reg. Location : Khar West (Main Centre)

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**MEDIWHEEL FULL BODY HEALTH CHECKUP MALE ABOVE 40/2D ECHO**

**GLYCOSYLATED HEMOGLOBIN (HbA1c)**

PARAMETER	RESULTS	BIOLOGICAL REF RANGE	METHOD
Glycosylated Hemoglobin (HbA1c), EDTA WB - CC	4.7	Non-Diabetic Level: < 5.7 % Prediabetic Level: 5.7-6.4 % Diabetic Level: >= 6.5 %	HPLC
Estimated Average Glucose (eAG), EDTA WB - CC	88.2	mg/dl	Calculated

**Intended use:**

- In patients who are meeting treatment goals, HbA1c test should be performed at least 2 times a year
- In patients whose therapy has changed or who are not meeting glycemic goals, it should be performed quarterly
- For microvascular disease prevention, the HbA1C goal for non pregnant adults in general is Less than 7%.

**Clinical Significance:**

- HbA1c, Glycosylated hemoglobin or glycated hemoglobin, is hemoglobin with glucose molecule attached to it.
- The HbA1c test evaluates the average amount of glucose in the blood over the last 2 to 3 months by measuring the percentage of glycosylated hemoglobin in the blood.

**Test Interpretation:**

- The HbA1c test evaluates the average amount of glucose in the blood over the last 2 to 3 months by measuring the percentage of Glycosylated hemoglobin in the blood.
- HbA1c test may be used to screen for and diagnose diabetes or risk of developing diabetes.
- To monitor compliance and long term blood glucose level control in patients with diabetes.
- Index of diabetic control, predicting development and progression of diabetic micro vascular complications.

**Factors affecting HbA1c results:**

**Increased in:** High fetal hemoglobin, Chronic renal failure, Iron deficiency anemia, Splenectomy, Increased serum triglycerides, Alcohol ingestion, Lead/opiate poisoning and Salicylate treatment.

**Decreased in:** Shortened RBC lifespan (Hemolytic anemia, blood loss), following transfusions, pregnancy, ingestion of large amount of Vitamin E or Vitamin C and Hemoglobinopathies

**Reflex tests:** Blood glucose levels, CGM (Continuous Glucose monitoring)

**References:** ADA recommendations, AACC, Wallach's interpretation of diagnostic tests 10th edition.

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**MEDIWHEEL FULL BODY HEALTH CHECKUP MALE ABOVE 40/2D ECHO**  
**PROSTATE SPECIFIC ANTIGEN (PSA)**

<u>PARAMETER</u>	<u>RESULTS</u>	<u>BIOLOGICAL REF RANGE</u>	<u>METHOD</u>
TOTAL PSA, Serum	0.753	<4.0 ng/ml	CLIA

**Clinical Significance:**

- PSA is detected in the serum of males with normal, benign hyper-plastic, and malignant prostate tissue.
- Monitoring patients with a history of prostate cancer as an early indicator of recurrence and response to treatment.
- Prostate cancer screening 4. The percentage of Free PSA (FPSA) in serum is described as being significantly higher in patients with BPH than in patients with prostate cancer. 5. Calculation of % free PSA (ie. FPSA/TPSA x 100 ), has been suggested as way of improving the differentiation of BPH and Prostate cancer.

**Interpretation:**

**Increased In-** Prostate diseases, Cancer, Prostatitis, Benign prostatic hyperplasia, Prostatic ischemia, Acute urinary retention, Manipulations like Prostatic massage, Cystoscopy, Needle biopsy, Transurethral resection, Digital rectal examination, Radiation therapy, Indwelling catheter, Vigorous bicycle exercise, Drugs (e.g., testosterone), Physiologic fluctuations. Also found in small amounts in other cancers (sweat and salivary glands, breast, colon, lung, ovary) and in Skene glands of female urethra and in term placenta, Acute renal failure, Acute myocardial infarction,

**Decreased In-** Ejaculation within 24-48 hours, Castration, Antiandrogen drugs (e.g., finasteride), Radiation therapy, Prostatectomy, PSA falls 17% in 3 days after lying in hospital, Artfactual (e.g., improper specimen collection; very high PSA levels). Finasteride (5- $\alpha$ -reductase inhibitor) reduces PSA by 50% after 6 months in men without cancer.

**Reflex Tests:** % FREE PSA , USG Prostate

**Limitations:**

- tPSA values determined on patient samples by different testing procedures cannot be directly compared with one another and could be the cause of erroneous medical interpretations. If there is a change in the tPSA assay procedure used while monitoring therapy, then the tPSA values obtained upon changing over to the new procedure must be confirmed by parallel measurements with both methods. Immediate PSA testing following digital rectal examination, ejaculation, prostatic massage, indwelling catheterization, ultrasonography and needle biopsy of prostate is not recommended as they falsely elevate levels.
- Patients who have been regularly exposed to animals or have received immunotherapy or diagnostic procedures utilizing immunoglobulins or immunoglobulin fragments may produce antibodies, e.g. HAMA, that interferes with immunoassays.
- PSA results should be interpreted in light of the total clinical presentation of the patient, including: symptoms, clinical history, data from additional tests, and other appropriate information.
- Serum PSA concentrations should not be interpreted as absolute evidence for the presence or absence of prostate cancer.

**Note :** The concentration of PSA in a given specimen, determined with assay from different manufacturers, may not be comparable due to differences in assay methods and reagent specificity.

**Reference:**

- Wallach's Interpretation of diagnostic tests
- Total PSA Pack insert



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**MEDIWHEEL FULL BODY HEALTH CHECKUP MALE ABOVE 40/2D ECHO**  
**URINE EXAMINATION REPORT**

<u>PARAMETER</u>	<u>RESULTS</u>	<u>BIOLOGICAL REF RANGE</u>	<u>METHOD</u>
<b><u>PHYSICAL EXAMINATION</u></b>			
Color	Pale yellow	Pale Yellow	Light scattering
Transparency	Clear	Clear	Light scattering
<b><u>CHEMICAL EXAMINATION</u></b>			
Specific Gravity	1.004	1.002-1.035	Refractive index
Reaction (pH)	7	5-8	pH Indicator
Proteins	Absent	Absent	Protein error principle
Glucose	Absent	Absent	GOD-POD
Ketones	Absent	Absent	Legals Test
Blood	Absent	Absent	Peroxidase
Bilirubin	Absent	Absent	Diazonium Salt
Urobilinogen	Normal	Normal	Diazonium Salt
Nitrite	Negative	Negative	Griess Test
<b><u>MICROSCOPIC EXAMINATION</u></b>			
(WBC)Pus cells / hpf	0.2	0-5/hpf	
Red Blood Cells / hpf	0.0	0-2 /hpf	
Epithelial Cells / hpf	0.0	0-5/hpf	
Hyaline Casts	0.1	0-1/hpf	
Pathological cast	0.0	0-0.3/hpf	
Calcium oxalate monohydrate crystals	0.0	0-1.4/hpf	
Calcium oxalate dihydrate crystals	0.0	0-1.4/hpf	
Triple phosphate crystals	0.0	0-1.4/hpf	
Uric acid crystals	0.0	0-1.4/hpf	
Amorphous debris	Absent	Absent	
Bacteria / hpf	3.9	0-29.5/hpf	
Yeast	Absent	Absent	



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Note: Microscopic examination performed by Automated Cuvette based technology. All the Abnormal results are confirmed by reagent strips and Manual method. The Microscopic examination findings are mentioned in decimal numbers as the arithmetic mean of the multiple fields scanned using microscopy. Reference: Pack Insert.

Others -

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**MEDIWHEEL FULL BODY HEALTH CHECKUP MALE ABOVE 40/2D ECHO  
BLOOD GROUPING & Rh TYPING**

PARAMETER	RESULTS
ABO GROUP	AB
Rh TYPING	Positive

NOTE: Test performed by automated Erythrocytes magnetized technology (EMT) which is more sensitive than conventional methods.

Specimen: EDTA Whole Blood and/or serum

**Clinical significance:**  
ABO system is most important of all blood group in transfusion medicine

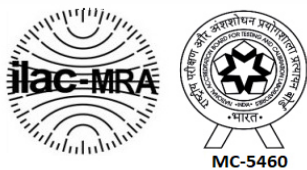
**Limitations:**

- ABO blood group of new born is performed only by cell (forward) grouping because allo antibodies in cord blood are of maternal origin.
- Since A & B antigens are not fully developed at birth, both Anti-A & Anti-B antibodies appear after the first 4 to 6 months of life. As a result, weaker reactions may occur with red cells of newborns than of adults.
- Confirmation of newborn's blood group is indicated when A & B antigen expression and the isoagglutinins are fully developed at 2 to 4 years of age & remains constant throughout life.
- Cord blood is contaminated with Wharton's jelly that causes red cell aggregation leading to false positive result
- The Hh blood group also known as Oh or Bombay blood group is rare blood group type. The term Bombay is used to refer the phenotype that lacks normal expression of ABH antigens because of inheritance of hh genotype.

**References:**

1. Denise M Harmening, Modern Blood Banking and Transfusion Practices- 6th Edition 2012. F.A. Davis company. Philadelphia
2. AABB technical manual

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**MEDIWHEEL FULL BODY HEALTH CHECKUP MALE ABOVE 40/2D ECHO**  
**LIPID PROFILE**

PARAMETER	RESULTS	BIOLOGICAL REF RANGE	METHOD
CHOLESTEROL, Serum	203.7	Desirable: <200 mg/dl Borderline High: 200-239mg/dl High: >/=240 mg/dl	CHOD-POD
TRIGLYCERIDES, Serum	110	Normal: <150 mg/dl Borderline-high: 150 - 199 mg/dl High: 200 - 499 mg/dl Very high:>/=500 mg/dl	Enzymatic colorimetric
HDL CHOLESTEROL, Serum	43.3	Desirable: >60 mg/dl Borderline: 40 - 60 mg/dl Low (High risk): <40 mg/dl	Elimination/ Catalase
NON HDL CHOLESTEROL, Serum	160.4	Desirable: <130 mg/dl Borderline-high:130 - 159 mg/dl High:160 - 189 mg/dl Very high: >/=190 mg/dl	Calculated
LDL CHOLESTEROL, Serum	138.4	Optimal: <100 mg/dl Near Optimal: 100 - 129 mg/dl Borderline High: 130 - 159 mg/dl High: 160 - 189 mg/dl Very High: >/= 190 mg/dl	Calculated
VLDL CHOLESTEROL, Serum	22.0	< /= 30 mg/dl	Calculated
CHOL / HDL CHOL RATIO, Serum	4.7	0-4.5 Ratio	Calculated
LDL CHOL / HDL CHOL RATIO, Serum	3.2	0-3.5 Ratio	Calculated

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**MEDIWHEEL FULL BODY HEALTH CHECKUP MALE ABOVE 40/2D ECHO**  
**THYROID FUNCTION TESTS**

<u>PARAMETER</u>	<u>RESULTS</u>	<u>BIOLOGICAL REF RANGE</u>	<u>METHOD</u>
Free T3, Serum	5.2	3.5-6.5 pmol/L	CLIA
Free T4, Serum	14.6	11.5-22.7 pmol/L	CLIA
sensitiveTSH, Serum	1.451	0.55-4.78 microU/ml	CLIA



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**Interpretation:**

A thyroid panel is used to evaluate thyroid function and/or help diagnose various thyroid disorders.

**Clinical Significance:**

- 1)TSH Values between high abnormal upto15 microIU/ml should be correlated clinically or repeat the test with new sample as physiological factors can give falsely high TSH.
- 2)TSH values may be trasiently altered becuae of non thyroidal illness like severe infections,liver disease, renal and heart severe burns, trauma and surgery etc.

TSH	FT4 / T4	FT3 / T3	Interpretation
High	Normal	Normal	Subclinical hypothyroidism, poor compliance with thyroxine, drugs like amiodarone, Recovery phase of non-thyroidal illness, TSH Resistance.
High	Low	Low	Hypothyroidism, Autoimmune thyroiditis, post radio iodine Rx, post thyroidectomy, Anti thyroid drugs, tyrosine kinase inhibitors & amiodarone, amyloid deposits in thyroid, thyroid tumors & congenital hypothyroidism.
Low	High	High	Hyperthyroidism, Graves disease, toxic multinodular goiter, toxic adenoma, excess iodine or thyroxine intake, pregnancy related (hyperemesis gravidarum, hydatiform mole)
Low	Normal	Normal	Subclinical Hyperthyroidism, recent Rx for Hyperthyroidism, drugs like steroids & dopamine), Non thyroidal illness.
Low	Low	Low	Central Hypothyroidism, Non Thyroidal Illness, Recent Rx for Hyperthyroidism.
High	High	High	Interfering anti TPO antibodies, Drug interference: Amiodarone, Heparin, Beta Blockers, steroids & anti epileptics.

**Diurnal Variation:**TSH follows a diurnal rhythm and is at maximum between 2 am and 4 am , and is at a minimum between 6 pm and 10 pm. The variation is on the order of 50 to 206%. Biological variation:19.7%(with in subject variation)

**Reflex Tests:**Anti thyroid Antibodies,USG Thyroid ,TSH receptor Antibody. Thyroglobulin, Calcitonin

**Limitations:**

1. Samples should not be taken from patients receiving therapy with high biotin doses (i.e. >5 mg/day) until atleast 8 hours following the last biotin administration.
2. Patient samples may contain heterophilic antibodies that could react in immunoassays to give falsely elevated or depressed results. this assay is designed to minimize interference from heterophilic antibodies.

**Reference:**

- 1.O.koulouri et al. / Best Practice and Research clinical Endocrinology and Metabolism 27(2013)
- 2.Interpretation of the thyroid function tests, Dayan et al. THE LANCET . Vol 357
- 3.Tietz ,Text Book of Clinical Chemistry and Molecular Biology -5th Edition
- 4.Biological Variation:From principles to Practice-Callum G Fraser (AACC Press)

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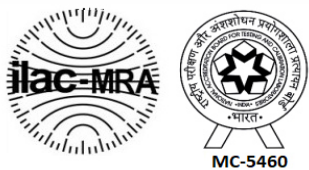
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**MEDIWHEEL FULL BODY HEALTH CHECKUP MALE ABOVE 40/2D ECHO**  
**LIVER FUNCTION TESTS**

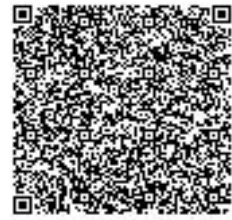
<u>PARAMETER</u>	<u>RESULTS</u>	<u>BIOLOGICAL REF RANGE</u>	<u>METHOD</u>
BILIRUBIN (TOTAL), Serum	1.35	0.3-1.2 mg/dl	Vanadate oxidation
BILIRUBIN (DIRECT), Serum	0.40	0-0.3 mg/dl	Vanadate oxidation
BILIRUBIN (INDIRECT), Serum	0.95	<1.2 mg/dl	Calculated
TOTAL PROTEINS, Serum	7.0	5.7-8.2 g/dL	Biuret
ALBUMIN, Serum	4.4	3.2-4.8 g/dL	BCG
GLOBULIN, Serum	2.7	2.3-3.5 g/dL	Calculated
A/G RATIO, Serum	1.6	1 - 2	Calculated
SGOT (AST), Serum	15.1	<34 U/L	Modified IFCC
SGPT (ALT), Serum	15.1	10-49 U/L	Modified IFCC
GAMMA GT, Serum	20.3	<73 U/L	Modified IFCC
ALKALINE PHOSPHATASE, Serum	62.4	46-116 U/L	Modified IFCC

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**MEDIWHEEL FULL BODY HEALTH CHECKUP MALE ABOVE 40/2D ECHO**

<u>PARAMETER</u>	<u>RESULTS</u>	<u>BIOLOGICAL REF RANGE</u>	<u>METHOD</u>
Urine Sugar (Fasting)	Absent	Absent	
Urine Ketones (Fasting)	Absent	Absent	
Urine Sugar (PP)	Absent	Absent	
Urine Ketones (PP)	Absent	Absent	

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Reg. Location : Khar West (Main Centre)

Collected : 28-Sep-2024 / 12:15  
Reported : 28-Sep-2024 / 15:44

### VITAMIN B12

PARAMETER	RESULTS	BIOLOGICAL REF RANGE	METHOD
VITAMIN B12, Serum	351	211-911 pg/ml	CLIA

#### Intended Use:

- Vitamin B12 is also referred to as cyanocobalamin/cobalmin.
- It is essential in DNA synthesis, haematopoiesis & CNS integrity.
- It cannot be synthesized in the human body & is seldom found in products of plant origin.
- The absorption of Vit B12 depends on the presence of Intrinsic factor (IF) & may be due to lack of IF secretion by the gastric mucosa (e.g. gastrectomy, gastric atrophy) or intestinal malabsorption (e.g. ileal resection, small intestinal diseases).
- Dietary Sources of vitamin B12 are meat, fish, eggs & dairy products.

#### Clinical Significance:

- Vitamin B12 or folate are both of diagnostic importance for the recognition of vitamin B12 or folate deficiency, especially in the context of the differential diagnosis of megaloblastic anemia.
- Untreated deficiencies will lead to megaloblastic anemia, irreversible central nervous system degeneration, peripheral neuropathies, dementia, poor cognitive performance & depression.

#### Interpretation:

Increased In- Vit B12 supplements, chronic granulocytic leukemia, COPD, Chronic renal failure, diabetes, leucocytosis, hepatitis, cirrhosis, obesity, polycythemia vera, protein malnutrition, severe CHF, uremia, Vit A intake, estrogens, drugs such as chloral hydrate.  
Decreased In- Inflammatory bowel disease, pernicious anaemia, strict vegetarians, malabsorption due to gastrectomy, smoking, pregnancy, multiple myeloma & haemodialysis. Alcohol & drugs like aminosalicic acid, anticonvulsants, cholestyramine, cimetidine, colchicine, metformin, neomycin, oral contraceptives, ranitidine & triamterine also cause a decrease in Vit B12 levels.

**Reflex Tests:** Active B12 (holotranscobalamin), Folate, Homocysteine, Methylmalonic acid (MMA) and Intrinsic factor antibody & parietal cell antibody.

**Limitations:** Preservatives, such as fluoride and ascorbic acid may cause interference

**Reference:** Vitamin B12 Pack insert

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**VITAMIN D TOTAL (25-OH VITAMIN D)**

PARAMETER	RESULTS	BIOLOGICAL REF RANGE	METHOD
25-hydroxy Vitamin D, Serum	19.6	Deficiency: < 20 ng/ml Insufficiency: 20 - < 30 ng/ml Sufficiency: 30 - 100 ng/ml Toxicity: > 100 ng/ml	CLIA

**Intended Use:**

- Diagnosis of vitamin D deficiency
- Differential diagnosis of causes of rickets and osteomalacia
- Monitoring vitamin D replacement therapy
- Diagnosis of hypervitaminosis D

**Clinical Significance:** Vitamin D is a steroid hormone known for its important role in regulating body levels of calcium and phosphorus and in the mineralization of bone. Measured 25-OH vitamin D includes D3 (Cholecalciferol) and D2 (Ergocalciferol) where D2 is absorbed from food and D3 is produced by the skin on exposure to sunlight. The major storage form of vitamin D is 25-OH vitamin D and is present in the blood at up to 1,000 fold higher concentration compared to the active 1,25-OH vitamin D; and has a longer half life making it an analyte of choice for determination of the vitamin D status.

**Interpretation:**

Increased In- D intoxication & Excessive exposure to sunlight

Decreased In: Lack of sunlight, Steatorrhea, Biliary and Portal cirrhosis, Pancreatic insufficiency, Inflammatory bowel disease, Alzheimer's disease, Malabsorption, Thyrotoxicosis, Dietary osteomalacia, Anticonvulsant osteomalacia, Celiac disease and Rickets

**Reflex Tests:** Serum Calcium, PTH and BMD

**Limitation:**

- For diagnostic purposes, results should be used in conjunction with other data; e.g. symptoms, results of other tests, clinical impressions, etc.
- Heterophilic antibodies in human serum can react with reagent immunoglobulins, interfering with in vitro immunoassays. Patients routinely exposed to animals or to animal serum products can be prone to this interference and anomalous values may be observed.
- Patients routinely exposed to animals or to animal serum products can be prone to this interference and anomalous values may be observed.
- Various methods for measuring vitamin D are available but correlate with significant differences.

**Reference:**

- Wallach's interpretation of diagnostic tests
- Vitamin D kit insert

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