ISO 9001:2015 | LABORATORY REPORT

Nextpath labs

Patient Name	: **MRS RANJEETA BADHOLIYA**	**Reg. No.**	: 0000285
Age & Sex	: 47 Years / Female	**CC Code**	: 609913
Referred By	: SELF	**Sample Drawn Date**	: 22/04/2024 06:52 pm
Refeeing Customer	: NA	**Registration Date**	: 22/04/2024 06:52 pm
Vial ID	: 240000285	**Report Date**	: 22/04/2024 08:40 pm
Sample Type	: WB- EDTA, Plasma- NaF, Se	**Report Status**	: RESULT
Sample Collected at	:		

NEXT 1.3

TEST	RESULT	UNITS	REFERENCE RANGE	TEST METHOD
VITAMIN B12				
RESULT	**137**	pg/ml	160-833	CMIA

Note

1)Nutritional and macrocytic anemias can be caused by a deficiency of vitamin B12. This deficiency can result from diets devoid of meat and bacterial products, from alcoholism, or from structural/functional damage to digestive or absorptive processes (forms of pernicious anemia). Malabsorption is the major cause of this deficiency through pancreatic deficiency, gastric atrophy or gastrectomy, intestinal damage, loss of intestinal vitamin B12 binding protein (intrinsic factor), production of autoantibodies directed against intrinsic factor, or related causes.

2)This vitamin is necessary for normal metabolism, DNA synthesis and red blood cell regeneration. Untreated deficiencies will lead to megaloblastic anemia and vitamin B12 deficiency results in irreversible central nervous system degeneration.

3)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. Radioassays were first reported for vitamin B12 in 1961. All utilize co-cyanocobalamin radiolabeled tracers and intrinsic factor for binding vitamin B12.

4)The various commercial assays differ in their free versus bound separation techniques and choice of specimen pretreatment. The presence of endogenous serum binding proteins for cyanocobalamin (transcobalamins including R-protein) and of immunoglobulins directed against intrinsic factor require that specimens are either boiled or treated at an alkaline pH to release the vitamin B12 and destroy the binding proteins.

5)In the late 1970's, radioassays using serum binding proteins or partially purified intrinsic factor measured levels of vitamin B12 which exceeded those determined by microbiological methods. This was caused by the presence of the serum binding protein or R-proteins in the assay.

6)R-protein specificity is poor compared to that of intrinsic factor and vitamin B12 analogs were being measured in addition to vitamin B12 itself. Since that time, recommendations have been established for the use of highly purified intrinsic factor throughout the industry.

7)Roche Cobase Vitamin B12 employs a competitive test principle using intrinsic factor specific for vitamin B12. Vitamin B12 in the sample competes with the added vitamin B12 labeled with biotin for the binding sites on the ruthenium-labeled intrinsic factor complex**.

METHOD :

--- End Of Report ---

Dr. A. Gupta
MD Pathology

✆ 0761-4900455 9827361674

2361, Ground Floor, Infront of Piller No. P68, Beside Balaji Restaurant, Madan Mahal Station Road, Wright Town, Jabalpur (M.P.)

ISO 9001:2015 | LABORATORY REPORT

Nextpath labs

Patient Name	: **MRS RANJEETA BADHOLIYA**	**Reg. No.**	: 0000285
Age & Sex	: 47 Years / Female	**CC Code**	: 609913
Referred By	: SELF	**Sample Drawn Date**	: 22/04/2024 06:52 pm
Refeeing Customer	: NA	**Registration Date**	: 22/04/2024 06:52 pm
Vial ID	: 240000285	**Report Date**	: 22/04/2024 08:40 pm
Sample Type	: WB- EDTA, Plasma- NaF, Se	**Report Status**	: RESULT
Sample Collected at	:		

NEXT 1.3

TEST	RESULT	UNITS	REFERENCE RANGE	TEST METHOD
(FBS)BLOOD SUGAR - FASTING				
Blood Sugar (F)	110.0	mg/dl	60-110	GOD POD

Comments:
*Glucose is the major carbohydrate present in blood. Its oxidation in the cells is the source of energy for the body. Increased levels of Glucose are found in Diabetes Mellitus, Hyperparathyroidism, Pancreatitis and renal failure.
*Decreased levels are found in Insulinoma, Hypothyroidism, Hypopituitarism and extensive Liver disease
Biological Reference Interval : Source: American Diabetic Association, Diabetes Care 2018:41 (Suppl.1) S13-S27

(LFT)LIVER FUNCTION TEST				
Total Protein	6.6	gm/dl	6.0-8.0	biured
Albumin	3.8	gm/dl	3.2-5.5	bromcresol green
Globulin	2.8	gm/dl	2.3-3.5	calculated
A/G Ratio	1.36			calculated
Bilirubin- Total	0.41	mg/dl	0.1-1.2	diazonium salt
Bilirubin- Direct	0.11	mg/dl	0-0.4	diazo reaction
Bilirubin- Indirect	0.3	mg/dl	0.1-0.8	DGKC
SGOT	20.4	IU/L	05-40	NADH w/o P-5-P
SGPT	24.7	IU/L	05-40	NADH w/o p-5-P
Alkaline Phosphatase	151.8	IU/L	Children(3-15 Y)-250-740 adult-100-250	30Nitroanilide bubs
LIPID PROFILE				
S.Cholesterol	180.87	mg/dl	00-200	enzymetic
S.Triglycerides	**276.2**	mg/dl	less than 150	glycerol
HDL Cholesterol	**32.54**	mg/dl	> 35	direct homogenous

Dr. A. Gupta
MD Pathology

✆ 0761-4900455 9827361674
2361, Ground Floor, Infront of Piller No. P68, Beside Balaji Restaurant, Madan Mahal Station Road, Wright Town, Jabalpur (M.P.)

ISO 9001:2015 | LABORATORY REPORT

Nextpath labs

Patient Name	: **MRS RANJEETA BADHOLIYA**	**Reg. No.**	: 0000285
Age & Sex	: 47 Years / Female	**CC Code**	: 609913
Referred By	: SELF	**Sample Drawn Date**	: 22/04/2024 06:52 pm
Refeeing Customer	: NA	**Registration Date**	: 22/04/2024 06:52 pm
Vial ID	: 240000285	**Report Date**	: 22/04/2024 08:40 pm
Sample Type	: WB- EDTA, Plasma- NaF, Se	**Report Status**	: RESULT
Sample Collected at	:		

LDL Cholesterol	93.09	mg/dl	< 150	calculated
VLDL Cholesterol	55.24	mg/dl	Upto 30	calculated
S.Cholesterol/HDL Ratio	5.56		4.4-11	calculated

COMMENTS: Therapeutic target levels of lipids as per NCEP – ATP III recommendations:
Total Cholesterol (mg/dL) <200 - Desirable, 200-239 - Borderline High>240 - High
HDL Cholesterol (mg/dL) <40 - Low, >60 - High
LDL Cholesterol (mg/dL) <100 Optimal, [Primary Target of Therapy], 100-129 - Near Optimal/Above Optimal, 130-159 - Borderline High, 160-189 - High, >190 Very High
Serum Triglycerides (mg/dL) <150 Normal, 150-199 Borderline High, 200-499 High, >500 Very High

*NCEP recommends lowering of LDL Cholesterol as the primary therapeutic target with Lipid lowering agents, however, if Triglycerides remain >200 mg/dL after LDL goal is reached, set secondary goal for non-HDL Cholesterol (total minus HDL) 30 mg/dL higher than LDL goal.
*When Triglyceride level is > 400 mg/dL, Friedewald Equation is not applicable for calculation of LDL & VLDL. Hence the calculated values are not provided for such sample

SERUM IRON (TIBC)

Serum Iron	**39**		Male : 40-160 ug/dl Females : 35-145 ug/dl Neonates :63 - 220 ug/dl
Serum Unsaturated iron binding capacity (UIBC)	379.0	UG/DL	120-470
Total Iron Binding Capacity (TIBC)	**542**	uG/DL	250-400
Transferrin Saturation	**7**	%	20-50

SERUM CALCIUM

Result	9.59	mg/dl	8.4-10.4

Dr. A. Gupta
MD Pathology

✆ 0761-4900455 9827361674
2361, Ground Floor, Infront of Piller No. P68, Beside Balaji Restaurant, Madan Mahal Station Road, Wright Town, Jabalpur (M.P.)

ISO 9001:2015 | LABORATORY REPORT

Nextpath labs

Patient Name	: **MRS RANJEETA BADHOLIYA**	**Reg. No.**	: 0000285
Age & Sex	: 47 Years / Female	**CC Code**	: 609913
Referred By	: SELF	**Sample Drawn Date**	: 22/04/2024 07:13 pm
Refeeing Customer	: NA	**Registration Date**	: 22/04/2024 06:52 pm
Vial ID	: 240000285	**Report Date**	: 22/04/2024 08:40 pm
Sample Type	: WB- EDTA, Plasma- NaF, Se	**Report Status**	: RESULT
Sample Collected at	:		

Interpretation:

Category	Normal Ref. Rang
Premature	6.2 mg/dL to 11.0 mg/dL
0 to10 days	7.6 mg/dL to 10.4 mg/dL
10 days to 24 months	9.0 mg/dL to 11.0 mg/dL
Child 2 to 12 years	8.8 mg/dL to 10.8 mg/dL
Adult	8.4 mg/dL to 10.2 mg/dL
Male > 60 years	8.8 mg/dL to 10.0 mg/dL

Comments:

* Calcium in the body is found mainly in the bones (approximately 99%). In serum, Calcium exists in a free ionised form and in bound form (with Albumin). Hence, a decrease in Albumin causes lower Calcium levels and vice-versa.
* Calcium levels in serum depend on the Parathyroid Hormone.
* Increased Calcium levels are found in Bone tumors, Hyperparathyroidism. decreased levels are found in Hypoparathyroidism, renal failure, Rickets

* Calcium in the body is found mainly in the bones (approximately 99%). In serum, Calcium exists in a free ionised form and in bound form (with Albumin). Hence, a decrease in Albumin causes lower Calcium levels and vice-versa.
* Calcium levels in serum depend on the Parathyroid Hormone.
* Increased Calcium levels are found in Bone tumors, Hyperparathyroidism. decreased levels are found in Hypoparathyroidism, renal failure, Rickets

(RFT)RENAL FUNCTION TEST

BLOOD UREA	29.4	mg/dl	15-40	urease
SERUM CREATININE	1.0	mg/dl	0.6-1.1	modifide jaffes
URIC ACID	4.2	mg/dl	2.4-6.0	uricase
SODIUM (NA)	143.6	mmol/l	135-145	ISE direct
POTASSIUM(K)	4.2	mmol/l	3.8-5.2	ISE direct
CHLORIDE	105.42	mmol/l	98-108	ISE direct

(HBA1C)GLYCOSYLATED Hb REPORT

(HBA1C)	5.2	%	<5.7 Non diabetic 5.7 – 6.4 Borderline diabetic, >6.4 Diabetic
Average Blood Glucose (ABG)	102.54	mg/dl	70-130

Dr. A. Gupta
MD Pathology

✆ 0761-4900455 9827361674
2361, Ground Floor, Infront of Piller No. P68, Beside Balaji Restaurant, Madan Mahal Station Road, Wright Town, Jabalpur (M.P.)

ISO 9001:2015 | LABORATORY REPORT

Nextpath labs

Patient Name	: **MRS RANJEETA BADHOLIYA**	**Reg. No.**	: 0000285
Age & Sex	: 47 Years / Female	**CC Code**	: 609913
Referred By	: SELF	**Sample Drawn Date**	: 22/04/2024 06:52 pm
Refeeing Customer	: NA	**Registration Date**	: 22/04/2024 06:52 pm
Vial ID	: 240000285	**Report Date**	: 22/04/2024 08:40 pm
Sample Type	: WB- EDTA, Plasma- NaF, Se	**Report Status**	: RESULT
Sample Collected at	:		

Comments:

* HbA1c is an indicator of glycemic control. HbA1c represents average Glycemia over the past six to eight weeks. Glycation of Hemoglobin occurs over the entire 120 day life span of the Red Blood Cell, but within this 120 days. Clinical studies suggest that a patient in stable control will have 50% of their HbA1c formed in the month before sampling, 25% in the month before that, and the remaining 25% in months two to four.

*Mean Plasma Glucose mg/dL = 28.7 x A1C - 46.7. Correlation between HbA1c and Mean Plasma Glucose (MPG) is not "perfect" but rather only this means that to predict or estimate average glucose from HbA1c or vice-versa is not "perfect" but gives a good working ballpark estimate.

*Afternoon and evening results correlate more closely to HbA1c than morning results, perhaps because morning fasting glucose levels vary much more than daytime Glucose levels, which are easier to predict and control. As per IFCC recommendations 2007, HbA1c being reported as above maintaining traceability to both IFCC (mmol/mol) & NGSP (%) units.

METHOD :

--- End Of Report ---

Dr. A. Gupta
MD Pathology

✆ 0761-4900455 9827361674

2361, Ground Floor, Infront of Piller No. P68, Beside Balaji Restaurant, Madan Mahal Station Road, Wright Town, Jabalpur (M.P.)

ISO 9001:2015 | LABORATORY REPORT

Nextpath labs

Patient Name	: **MRS RANJEETA BADHOLIYA**	**Reg. No.**	: 0000285
Age & Sex	: 47 Years / Female	**CC Code**	: 609913
Referred By	: SELF	**Sample Drawn Date**	: 22/04/2024 06:52 pm
Refeeing Customer	: NA	**Registration Date**	: 22/04/2024 06:52 pm
Vial ID	: 240000285	**Report Date**	: 22/04/2024 08:40 pm
Sample Type	: WB- EDTA, Plasma- NaF, Se	**Report Status**	: RESULT
Sample Collected at	:		

NEXT 1.3

TEST	RESULT	UNITS	REFERENCE RANGE	TEST METHOD
THYROID FUNCTION TEST (T3,T4,TSH)				
Total Triiodothyronine T3	104.23	ng/dl	58-159	CMIA
Total Thyroxine T4	8.89	µg/dl	4.5-12	CMIA
Thyroid Stimulating Hormones (TSH)	**4.958**	µIU/ml	0.39-4.94	CMIA

Pregnancy

	TSH(µlU/mL)	T3(ng/dL)	TT4(µg/dL)
1 Trimester	0.10-2.50	89.9-196.6	4.4-11.5
2 Trimester	0.2-3.00	86.1-217.4	4.9-12.2
3 Trimester	0.3-3.00	79.9-186	5.1-13.2

*Assay results should be interpreted in context to the clinical condition and associated results of other investigations.
*Previous treatment with corticosteroid therapy may result in lower TSH levels while Thyroid hormone levels are normal.
*Results are invalidated if the client has undergone a radionuclide scan within 7-14 days before the test.
* Abnormal thyroid test findings often found in critically ill clients should be repeated after the critical nature of the condition is resolved.
*The production, circulation, and disposal of Thyroid hormone are altered throughout the stages of pregnancy.
*Hyperthyroidism (overactive thyroid):
*Hyperthyroidism (overactive Thyroid) occurs when your thyroid gland produces too much of the hormone Thyroxine. Hyperthyroidism can accelerate your bodys metabolism, causing unintentional weight loss and a rapid or irregular heartbeat.
Hypothyroidism (underactive thyroid): Hypothyroidism (underactive thyroid) is a condition in which your Thyroid gland doesnt produce enough of certain crucial hormones. Hypothyroidism may not cause noticeable symptoms in the early stages. Over time, untreated Hypothyroidism can cause a number of health problems, such as obesity, joint pain, infertility and heart disease.

METHOD :

--- End Of Report ---

Dr. A. Gupta
MD Pathology

✆ 0761-4900455 9827361674
2361, Ground Floor, Infront of Piller No. P68, Beside Balaji Restaurant, Madan Mahal Station Road, Wright Town, Jabalpur (M.P.)

ISO 9001:2015 | LABORATORY REPORT

Nextpath labs

Patient Name	: **MRS RANJEETA BADHOLIYA**	**Reg. No.**	: 0000285
Age & Sex	: 47 Years / Female	**CC Code**	: 609913
Referred By	: SELF	**Sample Drawn Date**	: 22/04/2024 06:52 pm
Refeeing Customer	: NA	**Registration Date**	: 22/04/2024 06:52 pm
Vial ID	: 240000285	**Report Date**	: 22/04/2024 08:40 pm
Sample Type	: WB- EDTA, Plasma- NaF, Se	**Report Status**	: RESULT
Sample Collected at	:		

NEXT 1.3

TEST	RESULT	UNITS	REFERENCE RANGE	TEST METHOD
COMPLETE BLOOD COUNT With ESR				
Haemoglobin	**8.6**	g/dl	11.5-16.0	
R.B.C. Count	**3.6**	10^6/mm³	3.80-5.80	
Packed Cell Volume (PCV)	**27.1**	%	40-54	
Mean Corpuscular Volume	**76.0**	µm³	80-100	
Mean Corpuscular Hemoglobin	**24.0**	Pg	27.0-32.0	
Mean Copuscular Hb Conc	**31.6**	g/dL	32.0-36.0	
RDW-CV	14.3	%	11.0-16.0	
Total WBC Count	8.7	10³/mm³	4.0-11.0	
DIFFERENTIAL COUNT				
Neutrophils	62	%	40-70	
Lymphocytes	32	%	20-40	
Monocytes	04	%	02-08	
Eosinophils	02	%	01-04	
Basophils	00	%	00-01	
Platelet Count	247	10³/mm³	150-400	
MPV	7.2	µm³	6.0-11.0	
ESR	**35**	mm/hr	00-20	
Remark	.			

METHOD :

--- End Of Report ---

Dr. A. Gupta
MD Pathology

✆ 0761-4900455 9827361674

2361, Ground Floor, Infront of Piller No. P68, Beside Balaji Restaurant, Madan Mahal Station Road, Wright Town, Jabalpur (M.P.)