

Dr. Vinay Chopra  
MD (Pathology & Microbiology)  
Chairman & Consultant Pathologist

Dr. Yugam Chopra  
MD (Pathology)  
CEO & Consultant Pathologist

NAME : Mrs. SEEMA SHARMA  
AGE/ GENDER : 60 YRS/FEMALE  
COLLECTED BY : SURJESH  
REFERRED BY :  
BARCODE NO. : 01516888  
CLIENT CODE. : KOS DIAGNOSTIC LAB  
CLIENT ADDRESS : 6349/1, NICHOLSON ROAD, AMBALA CANTT

PATIENT ID : 1611717  
REG. NO./LAB NO. : 012409130039  
REGISTRATION DATE : 13/Sep/2024 11:49 AM  
COLLECTION DATE : 13/Sep/2024 01:27PM  
REPORTING DATE : 13/Sep/2024 12:48PM

Test Name	Value	Unit	Biological Reference interval
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CLINICAL CHEMISTRY/BIOCHEMISTRY

UREA

UREA: SERUM by UREASE - GLUTAMATE DEHYDROGENASE (GLDH)	72.45 <sup>H</sup>	mg/dL	10.00 - 50.00
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CREATININE

CREATININE: SERUM  
by ENZYMATIC, SPECTROPHOTOMETRY

1.57<sup>H</sup>

mg/dL

0.40 - 1.20



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<b>BARCODE NO.</b>	: 01516888	<b>REPORTING DATE</b>	: 13/Sep/2024 02:41PM
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#### ELECTROLYTES COMPLETE PROFILE

SODIUM: SERUM <i>by ISE (ION SELECTIVE ELECTRODE)</i>	142.7	mmol/L	135.0 - 150.0
POTASSIUM: SERUM <i>by ISE (ION SELECTIVE ELECTRODE)</i>	4.75	mmol/L	3.50 - 5.00
CHLORIDE: SERUM <i>by ISE (ION SELECTIVE ELECTRODE)</i>	107.03	mmol/L	90.0 - 110.0

#### INTERPRETATION:-

##### **SODIUM:-**

Sodium is the major cation of extra-cellular fluid. Its primary function in the body is to chemically maintain osmotic pressure & acid base balance & to transmit nerve impulse.

##### **HYPONATREMIA (LOW SODIUM LEVEL) CAUSES:-**

1. Low sodium intake.
2. Sodium loss due to diarrhea & vomiting with adequate water and iadequate salt replacement.
3. Diuretics abuses.
4. Salt loosing nephropathy.
5. Metabolic acidosis.
6. Adrenocortical issuficiency .
7. Hepatic failure.

##### **HYPERNATREMIA (INCREASED SODIUM LEVEL) CAUSES:-**

1. Hyperapnea (Prolonged)
2. Diabetes insipidus
3. Diabetic acidosis
4. Cushings syndrome
5. Dehydration

##### **POTASSIUM:-**

Potassium is the major cation in the intracellular fluid. 90% of potassium is concentrated within the cells. When cells are damaged, potassium is released in the blood.


##### **HYPOKALEMIA (LOW POTASSIUM LEVELS):-**


1. Diarrhoea, vomiting & malabsorption.
2. Severe Burns.
3. Increased Secretions of Aldosterone

##### **HYPERKALEMIA (INCREASED POTASSIUM LEVELS):-**

1. Oliguria
2. Renal failure or Shock
3. Respiratory acidosis



  
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4.Hemolysis of blood



  
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## VITAMINS

### VITAMIN B12/COBALAMIN

**VITAMIN B12/COBALAMIN: SERUM**
149<sup>L</sup>
pg/mL
190.0 - 890.0

by CMIA (CHEMILUMINESCENT MICROPARTICLE IMMUNOASSAY)

#### INTERPRETATION:-

INCREASED VITAMIN B12	DECREASED VITAMIN B12
1. Ingestion of Vitamin C	1. Pregnancy
2. Ingestion of Estrogen	2. DRUGS: Aspirin, Anti-convulsants, Colchicine
3. Ingestion of Vitamin A	3. Ethanol Igestion
4. Hepatocellular injury	4. Contraceptive Harmones
5. Myeloproliferative disorder	5. Haemodialysis
6. Uremia	6. Multiple Myeloma

1. Vitamin B12 (cobalamin) is necessary for hematopoiesis and normal neuronal function.  
 2. In humans, it is obtained only from animal proteins and requires intrinsic factor (IF) for absorption.  
 3. The body uses its vitamin B12 stores very economically, reabsorbing vitamin B12 from the ileum and returning it to the liver; very little is excreted.  
 4. Vitamin B12 deficiency may be due to lack of IF secretion by gastric mucosa (eg, gastrectomy, gastric atrophy) or intestinal malabsorption (eg, ileal resection, small intestinal diseases).  
 5. Vitamin B12 deficiency frequently causes macrocytic anemia, glossitis, peripheral neuropathy, weakness, hyperreflexia, ataxia, loss of proprioception, poor coordination, and affective behavioral changes. These manifestations may occur in any combination; many patients have the neurologic defects without macrocytic anemia.  
 6. Serum methylmalonic acid and homocysteine levels are also elevated in vitamin B12 deficiency states.  
 7. Follow-up testing for antibodies to intrinsic factor (IF) is recommended to identify this potential cause of vitamin B12 malabsorption.  
**NOTE:** A normal serum concentration of vitamin B12 does not rule out tissue deficiency of vitamin B12. The most sensitive test for vitamin B12 deficiency at the cellular level is the assay for MMA. If clinical symptoms suggest deficiency, measurement of MMA and homocysteine should be considered, even if serum vitamin B12 concentrations are normal.

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



  
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