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 MD (Pathology & Microbiology)  
 Chairman & Consultant Pathologist

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 MD (Pathology)  
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<b>NAME</b>	: Mr. RUPESH AGGARWAL	<b>PATIENT ID</b>	: 1606517
<b>AGE/ GENDER</b>	: 37 YRS/MALE	<b>REG. NO./LAB NO.</b>	: 012409090021
<b>COLLECTED BY</b>	: SURJESH	<b>REGISTRATION DATE</b>	: 09/Sep/2024 08:23 AM
<b>REFERRED BY</b>	:	<b>COLLECTION DATE</b>	: 09/Sep/2024 09:16AM
<b>BARCODE NO.</b>	: 01516610	<b>REPORTING DATE</b>	: 09/Sep/2024 10:37AM
<b>CLIENT CODE.</b>	: KOS DIAGNOSTIC LAB		
<b>CLIENT ADDRESS</b>	: 6349/1, NICHOLSON ROAD, AMBALA CANTT		

Test Name	Value	Unit	Biological Reference interval
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## VITAMINS

### VITAMIN B12/COBALAMIN

VITAMIN B12/COBALAMIN: SERUM	278	pg/mL	190.0 - 890.0
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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 lgestion
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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