

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

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

<b>NAME</b>	: Mr. MADAN LAL	<b>PATIENT ID</b>	: 1785364
<b>AGE/ GENDER</b>	: 83 YRS/MALE	<b>REG. NO./LAB NO.</b>	: <b>012503100034</b>
<b>COLLECTED BY</b>	: SURJESH	<b>REGISTRATION DATE</b>	: 10/Mar/2025 11:46 AM
<b>REFERRED BY</b>	: CENTRAL PHOENIX CLUB (AMBALA CANTT)	<b>COLLECTION DATE</b>	: 10/Mar/2025 11:54AM
<b>BARCODE NO.</b>	: 01526865	<b>REPORTING DATE</b>	: 10/Mar/2025 12:03PM
<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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**HAEMATOLOGY**

**ERYTHROCYTE SEDIMENTATION RATE (ESR)**

ERYTHROCYTE SEDIMENTATION RATE (ESR) <i>by RED CELL AGGREGATION BY CAPILLARY PHOTOMETRY</i>	5	mm/1st hr	0 - 20
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**INTERPRETATION:**

1. ESR is a non-specific test because an elevated result often indicates the presence of inflammation associated with infection, cancer and auto-immune disease, but does not tell the health practitioner exactly where the inflammation is in the body or what is causing it.
2. An ESR can be affected by other conditions besides inflammation. For this reason, the ESR is typically used in conjunction with other test such as C-reactive protein
3. This test may also be used to monitor disease activity and response to therapy in both of the above diseases as well as some others, such as systemic lupus erythematosus

**CONDITION WITH LOW ESR**

A low ESR can be seen with conditions that inhibit the normal sedimentation of red blood cells, such as a high red blood cell count (polycythaemia), significantly high white blood cell count (leucocytosis), and some protein abnormalities. Some changes in red cell shape (such as sickle cells in sickle cell anaemia) also lower the ESR.

**NOTE:**

1. ESR and C - reactive protein (C-RP) are both markers of inflammation.
2. Generally, ESR does not change as rapidly as does CRP, either at the start of inflammation or as it resolves.
3. **CRP is not affected by as many other factors as is ESR, making it a better marker of inflammation.**
4. If the ESR is elevated, it is typically a result of two types of proteins, globulins or fibrinogen.
5. Women tend to have a higher ESR, and menstruation and pregnancy can cause temporary elevations.
6. Drugs such as dextran, methyldopa, oral contraceptives, penicillamine procainamide, theophylline, and vitamin A can increase ESR, while aspirin, cortisone, and quinine may decrease it



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<b>AGE/ GENDER</b>	: 83 YRS/MALE	<b>REG. NO./LAB NO.</b>	: 012503100034
<b>COLLECTED BY</b>	: SURJESH	<b>REGISTRATION DATE</b>	: 10/Mar/2025 11:46 AM
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<b>BARCODE NO.</b>	: 01526865	<b>REPORTING DATE</b>	: 10/Mar/2025 01:19PM
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Test Name	Value	Unit	Biological Reference interval
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**CLINICAL CHEMISTRY/BIOCHEMISTRY**

**ELECTROLYTES COMPLETE PROFILE**

SODIUM: SERUM <i>by ISE (ION SELECTIVE ELECTRODE)</i>	137.2	mmol/L	135.0 - 150.0
POTASSIUM: SERUM <i>by ISE (ION SELECTIVE ELECTRODE)</i>	4.44	mmol/L	3.50 - 5.00
CHLORIDE: SERUM <i>by ISE (ION SELECTIVE ELECTRODE)</i>	102.9	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 insufficiency .
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



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- 2. Renal failure or Shock
- 3. Respiratory acidosis
- 4. Hemolysis of blood

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

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