

Dr. Vinay Chopra
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 Chairman & Consultant Pathologist

Dr. Yugam Chopra
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|-----------------------|--|--------------------------|------------------------|
| NAME | : Mr. RAVINDER SINGH | PATIENT ID | : 1621980 |
| AGE/ GENDER | : 49 YRS/MALE | REG. NO./LAB NO. | : 042410090002 |
| COLLECTED BY | : | REGISTRATION DATE | : 09/Oct/2024 11:28 AM |
| REFERRED BY | : | COLLECTION DATE | : 09/Oct/2024 03:15PM |
| BARCODE NO. | : A0465704 | REPORTING DATE | : 09/Oct/2024 03:27PM |
| CLIENT CODE. | : KOS DIAGNOSTIC SHAHBAD | | |
| CLIENT ADDRESS | : 6349/1, NICHOLSON ROAD, AMBALA CANTT | | |

| Test Name | Value | Unit | Biological Reference interval |
|-----------|-------|------|-------------------------------|
|-----------|-------|------|-------------------------------|

HAEMATOLOGY

ERYTHROCYTE SEDIMENTATION RATE (ESR)

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|---|-----------------|-----------|--------|
| ERYTHROCYTE SEDIMENTATION RATE (ESR) | 49 ^H | mm/1st hr | 0 - 20 |
|---|-----------------|-----------|--------|

by RED CELL AGGREGATION BY CAPILLARY PHOTOMETRY

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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| BARCODE NO. | : A0465703 | REPORTING DATE | : 09/Oct/2024 03:58PM |
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IMMUNOPATHOLOGY/SEROLOGY

C-REACTIVE PROTEIN (CRP)

C-REACTIVE PROTEIN (CRP) QUANTITATIVE: 28.89^H mg/L 0.0 - 6.0

SERUM
by NEPHLOMETRY

INTERPRETATION:

1. C-reactive protein (CRP) is one of the most sensitive acute-phase reactants for inflammation.
2. CRP levels can increase dramatically (100-fold or more) after severe trauma, bacterial infection, inflammation, surgery, or neoplastic proliferation.
3. CRP levels (Quantitative) has been used to assess activity of inflammatory disease, to detect infections after surgery, to detect transplant rejection, and to monitor these inflammatory processes.
4. As compared to ESR, CRP shows an earlier rise in inflammatory disorders which begins in 4-6 hrs, the intensity of the rise being higher than ESR and the recovery being earlier than ESR. Unlike ESR, CRP levels are not influenced by hematologic conditions like Anemia, Polycythemia etc.,
5. Elevated values are consistent with an acute inflammatory process.

- NOTE:**
1. Elevated C-reactive protein (CRP) values are nonspecific and should not be interpreted without a complete clinical history.
 2. Oral contraceptives may increase CRP levels.



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TEST PERFORMED AT: KOS DIAGNOSTIC LAB, AMBALA CANTT.

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WIDAL SLIDE AGGLUTINATION TEST

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|--|--------|-------|---------|
| SALMONELLA TYPHI O <i>by SLIDE AGGLUTINATION</i> | 1 : 40 | TITRE | 1 : 80 |
| SALMONELLA TYPHI H <i>by SLIDE AGGLUTINATION</i> | 1 : 40 | TITRE | 1 : 160 |
| SALMONELLA PARATYPHI AH <i>by SLIDE AGGLUTINATION</i> | NIL | TITRE | 1 : 160 |
| SALMONELLA PARATYPHI BH <i>by SLIDE AGGLUTINATION</i> | NIL | TITRE | 1 : 160 |

INTERPRETATION:

1. Titres of 1:80 or more for "O" agglutinin is considered significant.
2. Titres of 1:160 or more for "H" agglutinin is considered significant.

LIMITATIONS:

1. Agglutinins usually appear by 5th to 6th day of illness of enteric fever, hence a negative result in early stage is inconclusive. The titre then rises till 3rd or 4th week, after which it declines gradually.
2. Lower titres may be found in normal individuals.
3. A single positive result has less significance than the rising agglutination titre, since demonstration of rising titre four or more in 1st and 3rd week is considered as a definite evidence of infection.
4. A simultaneous rise in H agglutinins is suggestive of paratyphoid infection.

NOTE:

1. Individuals with prior infection or immunization with TAB vaccine may develop an ANAMNESTIC RESPONSE (False-Positive) during an unrelated fever i.e High titres of antibodies to various antigens. This may be differentiated by repetition of the test after a week.
2. The anamnestic response shows only a transient rise, while in enteric fever rise is sustained.
3. H agglutinins tend to persist for many months after vaccination but O agglutinins tend to disappear sooner i.e within 6 months. Therefore rise in O agglutinins indicate recent infection.

*** End Of Report ***



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