

(A Unit of KOS Healthcare)



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NAME : Mrs. GURPREET KAUR

AGE/ GENDER : 54 YRS/FEMALE PATIENT ID : 1584006

COLLECTED BY : SURJESH REG. NO./LAB NO. : 012408180027

 REFERRED BY
 : 18/Aug/2024 08:53 AM

 BARCODE NO.
 : 01515239
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 : KOS DIAGNOSTIC LAB
 REPORTING DATE
 : 18/Aug/2024 10:17AM

**CLIENT ADDRESS**: 6349/1, NICHOLSON ROAD, AMBALA CANTT

Test Name Value Unit Biological Reference interval

# HAEMATOLOGY COMPLETE BLOOD COUNT (CBC)

#### RED BLOOD CELLS (RBCS) COUNT AND INDICES

HAEMOCI OBINI (HB)

HAEMOGLOBIN (HB) by CALORIMETRIC	11.7 <sup>L</sup>	gm/dL	12.0 - 16.0
RED BLOOD CELL (RBC) COUNT  by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE	4.1	Millions/cmm	3.50 - 5.00
PACKED CELL VOLUME (PCV) by calculated by automated hematology analyzer	36.4 <sup>L</sup>	%	37.0 - 50.0
MEAN CORPUSCULAR VOLUME (MCV) by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER	88.7	fL	80.0 - 100.0
MEAN CORPUSCULAR HAEMOGLOBIN (MCH) by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER	28.5	pg	27.0 - 34.0
MEAN CORPUSCULAR HEMOGLOBIN CONC. (MCHC) by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER	32.2	g/dL	32.0 - 36.0
RED CELL DISTRIBUTION WIDTH (RDW-CV)  by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER	14.5	%	11.00 - 16.00
RED CELL DISTRIBUTION WIDTH (RDW-SD)  by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER	47.7	fL	35.0 - 56.0
MENTZERS INDEX by Calculated	21.63	RATIO	BETA THALASSEMIA TRAIT: < 13.0 IRON DEFICIENCY ANEMIA: >13.0
GREEN & KING INDEX by CALCULATED	31.33	RATIO	BETA THALASSEMIA TRAIT:<= 65.0 IRON DEFICIENCY ANEMIA: > 65.0
WHITE BLOOD CELLS (WBCS)			
TOTAL LEUCOCYTE COUNT (TLC) by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY	5770	/cmm	4000 - 11000
NUCLEATED RED BLOOD CELLS (nRBCS)  by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER & MICROSCOPY	NIL		0.00 - 20.00
NUCLEATED RED BLOOD CELLS (nRBCS) % by Calculated by automated hematology analyzer &	NIL	%	< 10 %

#### **DIFFERENTIAL LEUCOCYTE COUNT (DLC)**



MICROSCOPY

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Test Name	Value	Unit	Biological Reference interval			
NEUTROPHILS  by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY	60	%	50 - 70			
LYMPHOCYTES  by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY	29	%	20 - 40			
EOSINOPHILS  by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY	4	%	1 - 6			
MONOCYTES  by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY	7	%	2 - 12			
BASOPHILS  by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY	0	%	0 - 1			
IMMATURE GRANULOCTE (IG) % by flow cytometry by sf cube & microscopy	0	%	0 - 5.0			
ABSOLUTE LEUKOCYTES (WBC) COUNT						
ABSOLUTE NEUTROPHIL COUNT  by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY	3462	/cmm	2000 - 7500			
ABSOLUTE LYMPHOCYTE COUNT  by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY	1673	/cmm	800 - 4900			
ABSOLUTE EOSINOPHIL COUNT  by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY	231	/cmm	40 - 440			
ABSOLUTE MONOCYTE COUNT by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY	404	/cmm	80 - 880			
PLATELETS AND OTHER PLATELET PREDICTIVE MARKERS.						
PLATELET COUNT (PLT) by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE	243000	/cmm	150000 - 450000			
PLATELETCRIT (PCT) by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE	0.3	%	0.10 - 0.36			
MEAN PLATELET VOLUME (MPV) by hydro dynamic focusing, electrical impedence	12	fL	6.50 - 12.0			
PLATELET LARGE CELL COUNT (P-LCC) by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE	109000 <sup>H</sup>	/cmm	30000 - 90000			
PLATELET LARGE CELL RATIO (P-LCR) by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE	44.7	%	11.0 - 45.0			
PLATELET DISTRIBUTION WIDTH (PDW) by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE NOTE: TEST CONDUCTED ON EDTA WHOLE BLOOD	16.3	%	15.0 - 17.0			



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: 18/Aug/2024 10:50AM

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Test Name Value Unit **Biological Reference interval** 

#### ERYTHROCYTE SEDIMENTATION RATE (ESR)

**ERYTHROCYTE SEDIMENTATION RATE (ESR)** 

0 - 20

REPORTING DATE

by MODIFIED WESTERGREN AUTOMATED METHOD

#### INTERPRETATION:

CLIENT CODE.

- 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.

- ESR and C reactive protein (C-RP) are both markers of inflammation.
   Generally, ESR does not change as rapidly as does CRP, either at the start of inflammation or as it resolves.
   CRP is not affected by as many other factors as is ESR, making it a better marker of inflammation.
   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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CLIENT ADDRESS : 6349/1, NICHOLSON ROAD, AMBALA CANTT

Test Name Value Unit Biological Reference interval

# CLINICAL CHEMISTRY/BIOCHEMISTRY URIC ACID

URIC ACID: SERUM 6.61 mg/dL 2.50 - 6.80

by URICASE - OXIDASE PEROXIDASE

#### <u> NTERPRETATION:-</u>

1.GOUT occurs when high levels of Uric Acid in the blood cause crystals to form & accumulate around a joint.

2.Uric Acid is the end product of purine metabolism. Uric acid is excreted to a large degree by the kidneys and to a smaller degree in the intestinal tract by microbial degradation.

#### INCREASED:-

#### (A).DUE TO INCREASED PRODUCTION:-

1. Idiopathic primary gout.

2. Excessive dietary purines (organ meats, legumes, anchovies, etc).

3. Cytolytic treatment of malignancies especially leukemais & lymphomas.

4. Polycythemai vera & myeloid metaplasia.

5.Psoriasis.

6. Sickle cell anaemia etc.

#### (B).DUE TO DECREASED EXCREATION (BY KIDNEYS)

- 1. Alcohol ingestion.
- 2. Thiazide diuretics.
- 3.Lactic acidosis.
- 4. Aspirin ingestion (less than 2 grams per day ).
- 5. Diabetic ketoacidosis or starvation.
- 6.Renal failure due to any cause etc.

#### **DECREASED:**

### (A).DUE TO DIETARY DEFICIENCY

- 1. Dietary deficiency of Zinc, Iron and molybdenum.
- 2.Fanconi syndrome & Wilsons disease.
- 3. Multiple sclerosis.
- 4. Syndrome of inappropriate antidiuretic hormone (SIADH) secretion & low purine diet etc.

#### (B).DUE TO INCREASED EXCREATION

1.Drugs:-Probenecid, sulphinpyrazone, aspirin doses (more than 4 grams per day), corticosterroids and ACTH, anti-coagulants and estrogens etc.



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# IMMUNOPATHOLOGY/SEROLOGY WIDAL SLIDE AGGLUTINATION TEST

SALMONELLA TYPHI O	NIL	TITRE	1:80
by SLIDE AGGLUTINATION			
SALMONELLA TYPHI H	NIL	TITRE	1:160
by SLIDE AGGLUTINATION			
SALMONELLA PARATYPHI AH	NIL	TITRE	1:160
by SLIDE AGGLUTINATION			
SALMONELLA PARATYPHI BH	NIL	TITRE	1:160
by SLIDE AGGLUTINATION			

#### **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 repitition 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 Oagglutinins indicate recent infection.

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



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