

(A Unit of KOS Healthcare)



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

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

NAME : Mr. GURVINDER SINGH

AGE/ GENDER : 48 YRS/MALE PATIENT ID : 1687952

COLLECTED BY : REG. NO./LAB NO. : 012412020029

 REFERRED BY
 : 02/Dec/2024 10:38 AM

 BARCODE NO.
 : 01521846
 COLLECTION DATE
 : 02/Dec/2024 10:43 AM

 CLIENT CODE.
 : KOS DIAGNOSTIC LAB
 REPORTING DATE
 : 02/Dec/2024 11:20 AM

**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**

HAEMOGLOBIN (HB) by CALORIMETRIC	14.1	gm/dL	12.0 - 17.0
RED BLOOD CELL (RBC) COUNT by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE	5.4 <sup>H</sup>	Millions/cmm	3.50 - 5.00
PACKED CELL VOLUME (PCV) by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER	45.2	%	40.0 - 54.0
MEAN CORPUSCULAR VOLUME (MCV) by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER	83.7	fL	80.0 - 100.0
MEAN CORPUSCULAR HAEMOGLOBIN (MCH) by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER	26.1 <sup>L</sup>	pg	27.0 - 34.0
MEAN CORPUSCULAR HEMOGLOBIN CONC. (MCHC) by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER	31.2 <sup>L</sup>	g/dL	32.0 - 36.0
RED CELL DISTRIBUTION WIDTH (RDW-CV) by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER	12.9	%	11.00 - 16.00
RED CELL DISTRIBUTION WIDTH (RDW-SD) by Calculated by automated hematology analyzer	40.5	fL	35.0 - 56.0
MENTZERS INDEX by CALCULATED	15.5	RATIO	BETA THALASSEMIA TRAIT: < 13.0 IRON DEFICIENCY ANEMIA: >13.0
GREEN & KING INDEX by CALCULATED	19.99	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	6680	/cmm	4000 - 11000
NUCLEATED RED BLOOD CELLS (nRBCS) by automated 6 part hematology analyzer	NIL		0.00 - 20.00
NUCLEATED RED BLOOD CELLS (nRBCS) %	NIL	%	< 10 %



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by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER



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Test Name	Value	Unit	<b>Biological Reference interval</b>
DIFFERENTIAL LEUCOCYTE COUNT (DLC)			
NEUTROPHILS	44 <sup>L</sup>	%	50 - 70
by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY			
LYMPHOCYTES by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY	47 <sup>H</sup>	%	20 - 40
EOSINOPHILS	2	%	1 - 6
by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY	~	70	1 0
MONOCYTES	7	%	2 - 12
by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY			
BASOPHILS	0	%	0 - 1
by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY			
ABSOLUTE LEUKOCYTES (WBC) COUNT			
ABSOLUTE NEUTROPHIL COUNT	2939	/cmm	2000 - 7500
by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY	0.4.40		200 1000
ABSOLUTE LYMPHOCYTE COUNT by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY	3140	/cmm	800 - 4900
ABSOLUTE EOSINOPHIL COUNT	134	/cmm	40 - 440
by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY	134	/ CIIIIII	40 - 440
ABSOLUTE MONOCYTE COUNT	468	/cmm	80 - 880
by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY	100	7 011111	
ABSOLUTE BASOPHIL COUNT	0	/cmm	0 - 110
by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY			
PLATELETS AND OTHER PLATELET PREDICTIVE	MARKERS.		
PLATELET COUNT (PLT)	199000	/cmm	150000 - 450000
by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE			
PLATELETCRIT (PCT)	0.28	%	0.10 - 0.36
by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE		OT.	0.70.40.0
MEAN PLATELET VOLUME (MPV)	14 <sup>H</sup>	fL	6.50 - 12.0
by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE PLATELET LARGE CELL COUNT (P-LCC)	100000H	/omm	30000 - 90000
by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE	106000 <sup>H</sup>	/cmm	30000 - 90000
PLATELET LARGE CELL RATIO (P-LCR)	53 <sup>H</sup>	%	11.0 - 45.0
by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE	JJ	,0	11.0 10.0
PLATELET DISTRIBUTION WIDTH (PDW)	16.2	%	15.0 - 17.0
by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE			
NOTE: TEST CONDUCTED ON EDTA WHOLE BLOOD			



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# KOS Diagnostic Lab (A Unit of KOS Healthcare)



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

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**COLLECTED BY** : 012412020029 REG. NO./LAB NO.

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

**Test Name Value** Unit **Biological Reference interval** 



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: 02/Dec/2024 11:54AM

**NAME** : Mr. GURVINDER SINGH

**AGE/ GENDER** : 48 YRS/MALE **PATIENT ID** : 1687952

**COLLECTED BY** REG. NO./LAB NO. :012412020029

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

**Value** Unit **Biological Reference interval Test Name** 

REPORTING DATE

### **ERYTHROCYTE SEDIMENTATION RATE (ESR)**

ERYTHROCYTE SEDIMENTATION RATE (ESR)

mm/1st hr

by RED CELL AGGREGATION BY CAPILLARY PHOTOMETRY

#### 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. NOTE:

- 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.
   Women tend to have a higher ESR, and menstruation and pregnancy can cause temporary elevations.
   Progs such as doubtern mathyldona, oral contracentives, popicillamino procesingmide, the only viling, and vitality in the original process.

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

### **CLINICAL CHEMISTRY/BIOCHEMISTRY** LIVER FUNCTION TEST (COMPLETE)

BILIRUBIN TOTAL: SERUM by DIAZOTIZATION, SPECTROPHOTOMETRY	0.34	mg/dL	INFANT: 0.20 - 8.00 ADULT: 0.00 - 1.20
BILIRUBIN DIRECT (CONJUGATED): SERUM by DIAZO MODIFIED, SPECTROPHOTOMETRY	0.12	mg/dL	0.00 - 0.40
BILIRUBIN INDIRECT (UNCONJUGATED): SERUM by CALCULATED, SPECTROPHOTOMETRY	0.22	mg/dL	0.10 - 1.00
SGOT/AST: SERUM by IFCC, WITHOUT PYRIDOXAL PHOSPHATE	35.3	U/L	7.00 - 45.00
SGPT/ALT: SERUM by IFCC, WITHOUT PYRIDOXAL PHOSPHATE	53.9 <sup>H</sup>	U/L	0.00 - 49.00
AST/ALT RATIO: SERUM  by CALCULATED, SPECTROPHOTOMETRY	0.65	RATIO	0.00 - 46.00
ALKALINE PHOSPHATASE: SERUM by para nitrophenyl phosphatase by amino methyl propanol	179.39 <sup>H</sup>	U/L	40.0 - 130.0
GAMMA GLUTAMYL TRANSFERASE (GGT): SERUM by SZASZ, SPECTROPHTOMETRY	80.34 <sup>H</sup>	U/L	0.00 - 55.0
TOTAL PROTEINS: SERUM by BIURET, SPECTROPHOTOMETRY	6.28	gm/dL	6.20 - 8.00
ALBUMIN: SERUM by BROMOCRESOL GREEN	4.4	gm/dL	3.50 - 5.50
GLOBULIN: SERUM by CALCULATED, SPECTROPHOTOMETRY	1.88 <sup>L</sup>	gm/dL	2.30 - 3.50
A: GRATIO: SERUM by CALCULATED, SPECTROPHOTOMETRY	2.34 <sup>H</sup>	RATIO	1.00 - 2.00

#### **INTERPRETATION**

NOTE:- To be correlated in individuals having SGOT and SGPT values higher than Normal Referance Range.

USE:- Differential diagnosis of diseases of hepatobiliary system and pancreas.

### **INCREASED:**

DRUG HEPATOTOXICITY	> 2
ALCOHOLIC HEPATITIS	> 2 (Highly Suggestive)
CIRRHOSIS	1.4 - 2.0
INTRAHEPATIC CHOLESTATIS	> 1.5



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HEPATOCELLULAR CARCINOMA & CHRONIC HEPATITIS > 1.3 (Slightly Increased)

**DECREASED:** 

1. Acute Hepatitis due to virus, drugs, toxins (with AST increased 3 to 10 times upper limit of normal)

2. Extra Hepatic cholestatis: 0.8 (normal or slightly decreased).

#### PROGNOSTIC SIGNIFICANCE:

NORMAL	< 0.65
GOOD PROGNOSTIC SIGN	0.3 - 0.6
POOR PROGNOSTIC SIGN	1.2 - 1.6



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### IMMUNOPATHOLOGY/SEROLOGY **VDRL TITRES**

REACTIVE

by IMMUNOCHROMATOGRAPHY END POINT TITRES 1:4 DILUTION. by IMMUNOCHROMATOGRAPHY

**INTERPRETATION:** 

NOTE:

Titres of 1:8 and above are considered significant

1. This is a screening test for syphilis which is useful for following the progression of disease and response to therapy. Rising titers are of immense value in confirming the diagnosis.

2. Reactive results must be correlated with supporting clinical, historical and epidemiological evidence to arrive at a final diagnosis.

3. Biological false positive reactions exhibit low titers and are seen in conditions like Viral and Bacterial infections, Mycoplasma infection, Chlamydia infection, Malaria, Immunizations, Pregnancy, Autoimmune disorders & past history of Treponemal infection.

3. Subsequent testing of sera by one of specific treponemal antigen such as TPHA & FTA-ABS is recommended in these cases



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NON REACTIVE



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Test Name Value Unit Biological Reference interval

### TREPONEMA PALLIDUM HAEMAGLUTTINATION ASSAY (TPHA)

TREPONEMA PALLIDUM POSITIVE (+ve) NEGATIVE (-ve)

**HAEMAGLUTTINATION ASSAY (T.P.H.A.)** 

by IMMUNOCHROMATOGRAPHY

END POINT TITRES 1:4 DILUTION.

by IMMUNOCHROMATOGRAPHY

#### **INTERPRETATION:**

- 1.Syphilis is a chronic infection that progresses through distinct stages namely Primary, Secondary, Tertiary & Quarternary producing diverse clinical symptoms.
- 2.The infection is caused by the Spirochaete Treponema acquired usually by sexual contact although the disease may be transmitted through blood transfusion and intra-uterine infection.
- 3. Positive results indicate both past or present infections.
- 4. False positive results are seen in patients suffering from Leprosy, Infectious mononucleosis and Connective tissue disorders.
- 5. This test does not distinguish between Syphilis and other pathogenic treponemal infections.
- 6.All positive results should be confirmed with FTA-ABS (Fluorescent Treponemal Antibodies) test.



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Test Name Value Unit Biological Reference interval

### FLUORECSENT TREPONEMAL ANTIBODIES (FTA-ABS)

TITRES 1:160 TITRES < 1:40

by INDIRECT IMMUNOFLUORESCENCE

<u> NTERPRETATION:</u>

1.A Negative result does not exclude the possibility of exposure to infection by Treponema pallidum.

2. False Reactive Reactions in FTA-ABS are seen in 1 % population in patients suffering from chronic disease like leprosy & malaria and Auto immune disease like SLE.

3. This test is used for confirmation of syphilis due to its high sensitivity.

#### **COMMENTS:**

Syphilis is a systemic infectious disease caused by Treponema pallidum. Early syphilis is not life threatening, but late manifestations affect the life span and patient productivity. Untreated primary infections in the mother affect the fetus.

STATE OF THE DISEASE	PERCENTAGE POSITIVITY
PRIMARY SYPHILIS	80 - 90
SECONDARY SYPHILIS	99 - 100
TERTIARY SYPHILIS	98

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



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