

Dr. Vinay Chopra  
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Dr. Yugam Chopra  
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CEO & Consultant Pathologist

NAME : Baby. YANVI  
AGE/ GENDER : 9 YRS/FEMALE  
COLLECTED BY :  
REFERRED BY :  
BARCODE NO. : 01517768  
CLIENT CODE. : KOS DIAGNOSTIC LAB  
CLIENT ADDRESS : 6349/1, NICHOLSON ROAD, AMBALA CANTT

PATIENT ID : 1626333  
REG. NO./LAB NO. : 012409260048  
REGISTRATION DATE : 26/Sep/2024 04:23 PM  
COLLECTION DATE : 26/Sep/2024 04:25 PM  
REPORTING DATE : 26/Sep/2024 04:31 PM

Test Name	Value	Unit	Biological Reference interval
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## HAEMATOLOGY

### COMPLETE BLOOD COUNT (CBC)

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

HAEMOGLOBIN (HB) by CALORIMETRIC	12.1	gm/dL	12.0 - 16.0
RED BLOOD CELL (RBC) COUNT by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE	4.54	Millions/cmm	3.50 - 5.50
PACKED CELL VOLUME (PCV) by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER	37.8	%	35.0 - 49.0
MEAN CORPUSCULAR VOLUME (MCV) by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER	83.2	fL	80.0 - 100.0
MEAN CORPUSCULAR HAEMOGLOBIN (MCH) by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER	26.6 <sup>L</sup>	pg	27.0 - 34.0
MEAN CORPUSCULAR HEMOGLOBIN CONC. (MCHC) by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER	31.9 <sup>L</sup>	g/dL	32.0 - 36.0
RED CELL DISTRIBUTION WIDTH (RDW-CV) by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER	13.5	%	11.00 - 16.00
RED CELL DISTRIBUTION WIDTH (RDW-SD) by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER	41.8	fL	35.0 - 56.0
MENTZERS INDEX by CALCULATED	18.33	RATIO	BETA THALASSEMIA TRAIT: < 13.0 IRON DEFICIENCY ANEMIA: >13.0
GREEN & KING INDEX by CALCULATED	24.69	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	16500 <sup>H</sup>	/cmm	4000 - 12000
NUCLEATED RED BLOOD CELLS (nRBCS) by AUTOMATED 6 PART HEMATOLOGY ANALYZER	NIL		0.00 - 20.00
NUCLEATED RED BLOOD CELLS (nRBCS) % by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER	NIL	%	< 10 %

#### DIFFERENTIAL LEUCOCYTE COUNT (DLC)

NEUTROPHILS by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY	77 <sup>H</sup>	%	50 - 70
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<b>LYMPHOCYTES</b> <i>by FLOW CYTOMETRY BY SF CUBE &amp; MICROSCOPY</i>	15 <sup>L</sup>	%	20 - 45
<b>EOSINOPHILS</b> <i>by FLOW CYTOMETRY BY SF CUBE &amp; MICROSCOPY</i>	0 <sup>L</sup>	%	1 - 6
<b>MONOCYTES</b> <i>by FLOW CYTOMETRY BY SF CUBE &amp; MICROSCOPY</i>	8	%	3 - 12
<b>BASOPHILS</b> <i>by FLOW CYTOMETRY BY SF CUBE &amp; MICROSCOPY</i>	0	%	0 - 1
<b><u>ABSOLUTE LEUKOCYTES (WBC) COUNT</u></b>			
<b>ABSOLUTE NEUTROPHIL COUNT</b> <i>by FLOW CYTOMETRY BY SF CUBE &amp; MICROSCOPY</i>	12705 <sup>H</sup>	/cmm	2000 - 7500
<b>ABSOLUTE LYMPHOCYTE COUNT</b> <i>by FLOW CYTOMETRY BY SF CUBE &amp; MICROSCOPY</i>	2475	/cmm	800 - 4900
<b>ABSOLUTE EOSINOPHIL COUNT</b> <i>by FLOW CYTOMETRY BY SF CUBE &amp; MICROSCOPY</i>	0 <sup>L</sup>	/cmm	40 - 440
<b>ABSOLUTE MONOCYTE COUNT</b> <i>by FLOW CYTOMETRY BY SF CUBE &amp; MICROSCOPY</i>	1320 <sup>H</sup>	/cmm	80 - 880
<b>ABSOLUTE BASOPHIL COUNT</b> <i>by FLOW CYTOMETRY BY SF CUBE &amp; MICROSCOPY</i>	0	/cmm	0 - 110
<b><u>PLATELETS AND OTHER PLATELET PREDICTIVE MARKERS.</u></b>			
<b>PLATELET COUNT (PLT)</b> <i>by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE</i>	365000	/cmm	150000 - 450000
<b>PLATELET CRIT (PCT)</b> <i>by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE</i>	0.33	%	0.10 - 0.36
<b>MEAN PLATELET VOLUME (MPV)</b> <i>by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE</i>	9	fL	6.50 - 12.0
<b>PLATELET LARGE CELL COUNT (P-LCC)</b> <i>by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE</i>	71000	/cmm	30000 - 90000
<b>PLATELET LARGE CELL RATIO (P-LCR)</b> <i>by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE</i>	19.4	%	11.0 - 45.0
<b>PLATELET DISTRIBUTION WIDTH (PDW)</b> <i>by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE</i>	15.9	%	15.0 - 17.0
NOTE: TEST CONDUCTED ON EDTA WHOLE BLOOD			



  
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<b>BARCODE NO.</b>	: 01517768	<b>REPORTING DATE</b>	: 26/Sep/2024 06:18PM
<b>CLIENT CODE.</b>	: KOS DIAGNOSTIC LAB		
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### IMMUNOPATHOLOGY/SEROLOGY

#### DENGUE FEVER COMBO SCREENING - (NS1 ANTIGEN, IgG AND IgM)

DENGUE NS1 ANTIGEN - SCREENING by ICT (IMMUNOCHROMATOGRAPHY)	NEGATIVE (-ve)	NEGATIVE (-ve)
DENGUE ANTIBODY IgG - SCREENING by ICT (IMMUNOCHROMATOGRAPHY)	NEGATIVE (-ve)	NEGATIVE (-ve)
DENGUE ANTIBODY IgM - SCREENING by ICT (IMMUNOCHROMATOGRAPHY)	NEGATIVE (-ve)	NEGATIVE (-ve)

#### INTERPRETATION:-

- 1.This is a solid phase immunochromatographic ELISA test for the qualitative detection of the specific IgG and IgM antibodies against the Dengue virus.
- 2.The IgM antibodies take a minimum of 5-10 days in primary infection and 4-5 days in secondary infections to test positive and hence are suitable for the diagnosis of dengue fever only when the fever is approximately one week old.
- 3.The IgG antibodies develop at least two weeks after exposure to primary infection and subsequently remain positive for the rest of the life. A positive result is incapable of differentiating a current infection from a past infection.
- 4.The Dengue NS-1 antigen test is most suited for early diagnosis (within the first week of exposure).



  
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<b>BARCODE NO.</b>	: 01517768	<b>REPORTING DATE</b>	: 26/Sep/2024 05:57PM
<b>CLIENT CODE.</b>	: KOS DIAGNOSTIC LAB		
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#### WIDAL SLIDE AGGLUTINATION TEST

SALMONELLA TYPHI O by SLIDE AGGLUTINATION	1 : 20	TITRE	1 : 80
SALMONELLA TYPHI H by SLIDE AGGLUTINATION	NIL	TITRE	1 : 160
SALMONELLA PARATYPHI AH by SLIDE AGGLUTINATION	NIL	TITRE	1 : 160
SALMONELLA PARATYPHI BH by SLIDE AGGLUTINATION	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.



  
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Test Name	Value	Unit	Biological Reference interval
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## VITAMINS

### VITAMIN D/25 HYDROXY VITAMIN D3

VITAMIN D (25-HYDROXY VITAMIN D3): SERUM  
by CLIA (CHEMILUMINESCENCE IMMUNOASSAY)

20.4<sup>L</sup>

ng/mL

DEFICIENCY: < 20.0  
INSUFFICIENCY: 20.0 - 30.0  
SUFFICIENCY: 30.0 - 100.0  
TOXICITY: > 100.0

#### INTERPRETATION:

DEFICIENT:	< 20	ng/mL
INSUFFICIENT:	21 - 29	ng/mL
PREFERRED RANGE:	30 - 100	ng/mL
INTOXICATION:	> 100	ng/mL

- Vitamin D compounds are derived from dietary ergocalciferol (from plants, Vitamin D2), or cholecalciferol (from animals, Vitamin D3), or by conversion of 7- dihydrocholecalciferol to Vitamin D3 in the skin upon Ultraviolet exposure.
- 25-OH--Vitamin D represents the main body reservoir and transport form of Vitamin D and transport form of Vitamin D, being stored in adipose tissue and tightly bound by a transport protein while in circulation.
- Vitamin D plays a primary role in the maintenance of calcium homeostasis. It promotes calcium absorption, renal calcium absorption and phosphate reabsorption, skeletal calcium deposition, calcium mobilization, mainly regulated by parathyroid hormone (PTH).
- Severe deficiency may lead to failure to mineralize newly formed osteoid in bone, resulting in rickets in children and osteomalacia in adults.

#### DECREASED:

- Lack of sunshine exposure.
- Inadequate intake, malabsorption (celiac disease)
- Depressed Hepatic Vitamin D 25- hydroxylase activity
- Secondary to advanced Liver disease
- Osteoporosis and Secondary Hyperparathyroidism (Mild to Moderate deficiency)
- Enzyme Inducing drugs: anti-epileptic drugs like phenytoin, phenobarbital and carbamazepine, that increases Vitamin D metabolism.

#### INCREASED:

- Hypervitaminosis D is Rare, and is seen only after prolonged exposure to extremely high doses of Vitamin D. When it occurs, it can result in severe hypercalcemia and hyperphosphatemia.

**CAUTION:** Replacement therapy in deficient individuals must be monitored by periodic assessment of Vitamin D levels in order to prevent hypervitaminosis D

**NOTE:** -Dark coloured individuals as compare to whites, is at higher risk of developing Vitamin D deficiency due to excess of melanin pigment which interfere with Vitamin D absorption.

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



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