

[www.savechildrenfoundation.org](http://www.savechildrenfoundation.org)



**DEPARTMENT OF PATHOLOGY**

**Post Graduate Institute of Child Health**

Sector-30, Noida-201303

Phone/Fax: +91 -1202455552. Website: www.Ssphpgtinoida.com



Name: Sufiyan

CR. No: 981162300093528

Ref. By : Dr. Nita Radhakrishnan

Age/Sex: 9Y/M

OPD/IPD: IPD

Dept/Unit : PHO

Lab Ref.No: FCY-738/2023

Reg. Date: 18/12/2023

Reporting Date: 19/12/2023

**Test Name-** CSF for cytology

**Specimen:-** CSF.

**Physical Examination:-**

Volume : 0.6ml.  
Color : Colorless  
Appearance : Clear  
Coagulum : Nil  
Blood : Nil


**Microscopic Examination:-**

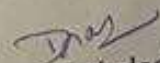
Total Leukocytes Count (TLC) : 10 cells/ $\mu$ l  
Differential Leukocytes Count (DLC) : P<sub>0</sub>% L<sub>70</sub>% M<sub>30</sub>%  
Occasional scattered RBCs.

**Impression:** Negative for malignant cells.

**CN: St. tus is defined as follows:**

CNS <sub>1</sub> : Nontraumatic puncture, $\leq 5$ WBC/ $\mu$ l CSF without leukemic cells after cyto centrifugation.
CNS <sub>2</sub> : Nontraumatic puncture, $\leq 5$ WBC/ $\mu$ l CSF with identifiable leukemic cells.
CNS <sub>3</sub> : Nontraumatic puncture, $> 5$ WBC/ $\mu$ l CSF with identifiable leukemic cells.
TLP+: Traumatic puncture with leukemic cells.
TLP- : Traumatic puncture without leukemic cells.
A traumatic lumbar puncture (TLP) is defined as 10 or more erythrocytes/ $\mu$ l CSF or as CSF macroscopically contaminated with blood.

  
Senior Resident

  
Pathologist



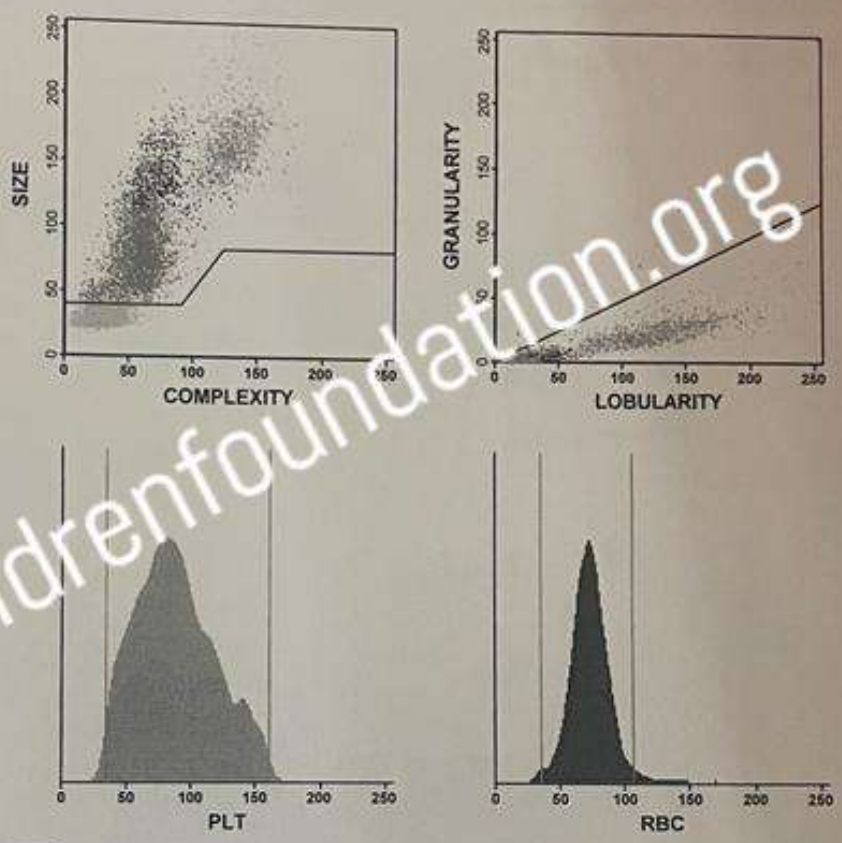
55

Spec ID No\_ID  
 Pat Name SUFIYAN  
 Pat ID OPD-3528  
 Doctor DR. NITA  
 Comment CBC

Spec Type Patient  
 DOB  
 Draw Date/Time  
 User Field 1 9Y  
 User Field 2  
 Sex Male

SEQ# 5016 OPID Guest  
 Run 12/12/2023 12:00 PM  
 Test CBC  
 Mode Open Param 1  
 Limits Universal Male (2)

WBC	11.0*	10e3/uL	SUSPECT
NEU	2.39*	21.8* %	WBC
LYM	6.96*	63.6* %	VAR LYM
MONO	1.36*	12.4* %	NRBC/RRBC
EOS	.036*	.329* %	DFLT (NLMEB)
BASO	.207*	1.89* %	
RBC	4.21	10e6/uL	
HGB	11.8	g/dL	
HCT	41.1	%	
MCV	97.7	fL	RBC MORPH
MCH	28.0	pg	
MCHC	28.6	g/dL	
RDW	17.5	%	
PLT	99.5	10e3/uL	
MPV	9.21	fL	



LIMIT SET			
WBC	3.7-10.1	RBC	4.06-5.58
NEU	1.63-6.96	HGB	12.9-15.9
LYM	1.09-2.99	HCT	37.7-53.7
MONO	.240-.790	MCV	81.1-96.0
EOS	.030-.440	MCH	27.0-31.2
BASO	0.00-.080	MCHC	31.8-35.4
		RDW	11.5-14.5
		PLT	155-366
		MPV	6.90-10.6

INTERPRETATION  
 -----WBC-----RBC-----PLT-----  
 SUSPECTED ABNORMAL POPULATIONS:  
 WBC Count Alert                      Nucleated RBC  
 WBC Diff Alert                        Resistant RBC  
 Variant Lymphocytes                RBC Morphology

USER DEFINED ABNORMALITIES:  
 Leukocytosis                            Anemia                                      Thrombocytopenia  
 Lymphocytosis                        Macrocytic RBC  
 Monocytosis                            Hypochromic  
 Basophilia                                Anisocytosis

zing

# DEPARTMENT OF PATHOLOGY

Post Graduate Institute of Child Health

Sector-30, Noida-201303

Phone/Fax: +91 -1202455552. Website: www. Ssphpgtinoida.com

Name Sufiyan Age/Sex 9y/m Date 31 / 12 / 2023  
CR.No./Pt.ID No. 093528 OPD/IPD OPD Lab Ref. No. \_\_\_\_\_  
Dept./Unit \_\_\_\_\_ Ref. By Dr. Mittal Investigation CBC

INVESTIGATION      RESULT      UNIT      BIOLOGICAL REFERENCE VALUES (Adult)

## HAEMATOLOGY REPORT

Hemoglobin	<u>7.5</u>	gm/dl	M-13.0-17.0, F-12.0-15.0
Total Leucocyte Count	<u>89600</u>	cells/cu.mm	4000 - 11000
<b>Differential leucocyte Count</b>			
Neutrophils	<u>71</u>	%	40-80
Lymphocytes	<u>38</u>	%	20-40
Eosinophils	<u>mid-31</u>	%	1-4
Monocytes	<u>/</u>	%	1-4
Basophils	<u>/</u>	%	1-2
Immature Cells	<u>/</u>		
ESR Wintrobe's Method	<u>/</u>	mm 1 <sup>st</sup> hour	0-10
ESR Westergren's Method	<u>/</u>	mm 1 <sup>st</sup> hour	0-20
Platelet Count	<u>2.5</u>	lac Cells/cu.mm	1.5-4.1
Absolute Eosinophil Count	<u>/</u>	Cells/cu.mm	40-440
Reticulocyte Count	<u>/</u>	%	0.5-2.5
Total R.B.C. Count	<u>2.68</u>	million/cu.mm	M4.5-5.5, F 3.8-4.8
P.C.V.	<u>24.7</u>	%	M-40-50, F-36-46
M.C.V.	<u>92.2</u>	fl	83-101
M.C.H.	<u>28.0</u>	pg	27.0-32.0
M.C.H.C.	<u>30.4</u>	gm/dl	31.5-34.5

General Blood Picture/Other.....

  
Technician

Pathologist



Chartable Page

Spec ID No\_ID  
 Pat Name SUFIYAN  
 Pat ID PHO 3528  
 Doctor DR NITA  
 Comment CBC

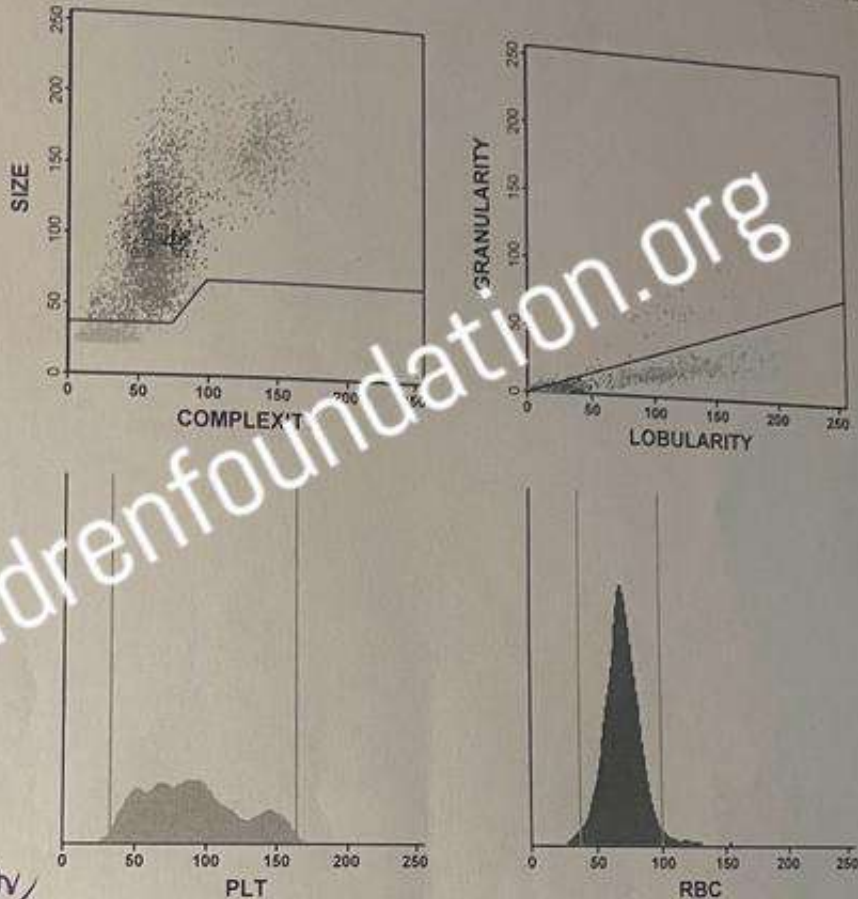
Spec Type Patient  
 DOB  
 Draw Date/Time  
 User Field 1 9 Y  
 User Field 2

Sex Male

SEQ# 5830 OPID Admin  
 Run 21/12/2023 11:49 AM  
 Test CBC  
 Mode Open Param 1  
 Limits Universal Male (2)

SUSPECT

WBC	5.08	10e3/uL	
NEU	7.04	13.9 %	
LYM	2.37	46.6 %	
MONO	1.67	32.8 %	NWBC
EOS	.059	1.15 %	
BASO	.285	5.61 %	
RBC	3.85	10e6/uL	
HGB	10.5	g/dL	
HCT	35.8	%	
MCV	93.0	fL	
MCH	27.2	pg	
MCHC	29.2	g/dL	
	16.8	%	
PLT	43.6	10e3/uL	
MPV	10.7	fL	



*Key*

LIMIT SET			
WBC	3.70-10.1	RBC	4.06-5.58
NEU	1.63-6.96	HGB	12.9-15.9
LYM	1.09-2.99	HCT	37.7-53.7
MONO	.240-.790	MCV	81.1-96.0
EOS	.030-.440	MCH	27.0-31.2
BASO	.080	MCHC	31.8-35.4
		RDW	11.5-14.5
		PLT	155-366
		MPV	6.90-10.6

INTERPRETATION

-----WBC-----RBC-----PLT-----

SUSPECTED ABNORMAL POPULATIONS:  
 NWBC

USER DEFINED ABNORMALITIES:

- |             |              |                  |
|-------------|--------------|------------------|
| Neutropenia | Anemia       | Thrombocytopenia |
| Monocytosis | Hypochromic  | Macrocytic PLT   |
| Basophilia  | Anisocytosis |                  |





Name	: MasterSUFYAN CK 53629	Centre Details	: CANKIDS
Age	: 10 Yrs Sex: Male	Accession.ID	: OQG2311020029
Collection Date	: 02/Nov/2023 12:00AM	Referred By	: DR NITA RADHA KRISHNAN
Received Date	: 02/Nov/2023 09:31AM	Report Date	: 04/Nov/2023 02:11PM
Registration Date	: 02/Nov/2023	Ref. No./TRF No.	: /

DEPARTMENT OF FLOW CYTOMETRY

Flowcytometry-Acute Leukemia MRD Panel

MRD Analysis done by Flow Cytometry

Markers used are CD10, CD19, CD20, CD22, CD34, CD38, CD45, CD58, CD33, CD73 in 10 colour panel

**CLINICAL DETAILS:** B - ALL on treatment.

Previous Immunophenotype: B - ALL

Sample time point: Completed induction

**SPECIMEN:** Bone marrow sample showed TLC = 18,500 cells/ $\mu$ l.

**FLOW CYTOMETRY ANALYSIS:**

Instrument / Software: BD FACS Canto / BD FACS DIVA

Cell Preparation Method: Lyse - Wash -Stain - Wash

Gating strategy: SSC Vs CD45 and SSC Vs CD19

Total events acquired = 17,89,095 cells / tube

CD34 = 1.3%

CD19 Positive events = 1,41,050

Abnormal events = 14,750

B - ALL residual blasts = 1.0% of All Leukocytes (expressing CD10, CD19, CD20, CD22, CD34, CD58, CD73)

**IMPRESSION:** B - ALL MRD = 1.0%

Please correlate with previous hematological, immunophenotypic reports, detailed clinical/ancillary inputs and exact day of chemotherapy. LOQ for this assay is 0.003%.

**Comment:**

First pull bone marrow aspirate is recommended sample for MRD testing as subsequent pulls may show hemodilution

Patients with acute lymphoblastic leukemia (ALL) in morphological remission may still have upto  $10^{10}$  residual malignant cells. Detection of minimal residual disease (MRD) at the end of induction therapy allows better estimation of the leukemic burden and can help selection of appropriate therapeutic strategies.



*Shivali Ahlawat*

Dr. Shivali Ahlawat  
MD, D.N.B (Path)  
Lab Director, National Reference Lab  
HMC RG-No.17038



(4)

Spec Type Patient  
 Sex Male  
 DOB  
 Draw Date/Time  
 User Field 1 9 Y  
 User Field 2

SEQ# 5409 OPID Guest  
 Run 16/12/2023 10:59 AM  
 Test CBC  
 Mode Open Param 1  
 Limits Universal Male (2)

PGICH, Sector-30, Noida-201303  
 DEPARTMENT OF BIOCHEMISTRY  
 BLOOD BIOCHEMISTRY EXAMINATION REPORT

Pt. ID./CR. 43528 OPD/IPD. OPD/PHO  
 NAME Supriyan AGE/SEX 9 Y/M  
 REF. BY DATE 16/12/23

Blood Glucose.....mg/dl (70-110mg/dl)  
 HbA1C.....%  
 Blood Urea.....mg/dl (10-45mg/dl)  
 S. Creatinine.....mg/dl (0.5-1.5mg/dl)  
 S. Uric Acid.....mg/dl (2.0-8.0mg/dl)  
 S. Sodium (Na<sup>+</sup>).....mmol/L (135-145mmol/L)  
 S. Potassium (K<sup>+</sup>).....mmol/L (3.5-5.5mmol/L)  
 Serum Bilirubin Total 1.3.....mg/dl (0.2-1.0mg/dl)  
 Conj (Direct) 0.6.....mg/dl (0.1-0.4mg/dl)

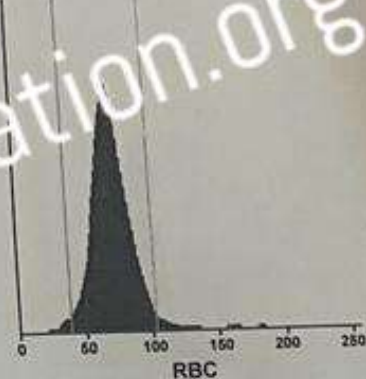
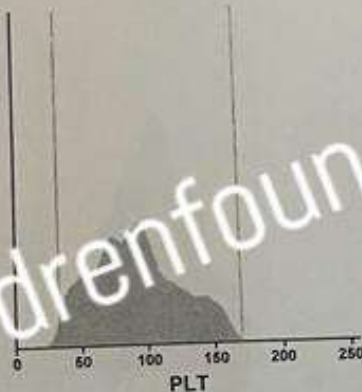
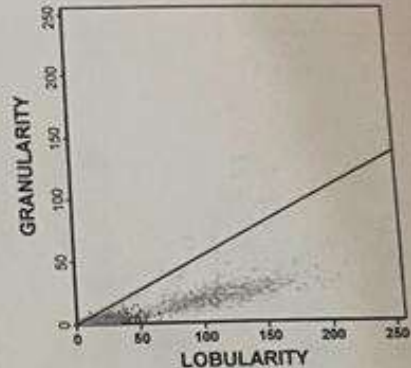
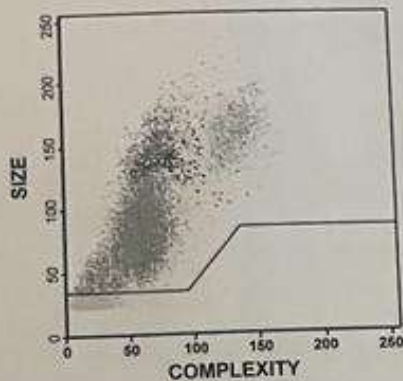
SGOT 1.55.....Units/L (0-40Units/L)  
 SGPT 9.80.....Units/L (0-45Units/L)  
 S. ALP 243.....IU/L (80-290IU/L)  
 S. Total Proteins 8.5.....gm/dl (6.0-8.0gm/dl)  
 S. Albumin 4.1.....gm/dl (4.0-5.5gm/dl)  
 Globulin 4.4.....gm/dl  
 S. Cholesterol (Total).....mg/dl (150-250mg/dl)  
 S. Triglycerides.....mg/dl (40-150mg/dl)  
 HDL Cholesterol.....mg/dl (30-65mg/dl)  
 LDL Cholesterol.....mg/dl (0-170mg/dl)  
 VLDL Cholesterol.....mg/dl (0-30mg/dl)  
 S. Calcium.....mg/dl (9.0-11.0mg/dl)  
 S. Phosphorus.....mg/dl (2.3-7.0mg/dl)  
 S. LDH.....U/L (0-250U/L)

CRP.....mg/L (0-5mg/L)  
 S. Amylase.....U/L (0-125U/L)  
 S. Lipase.....U/L (0-160U/L)  
 IgA.....mg/dl (70-400mg/dl)  
 IgM.....mg/dl (40-230mg/dl)

S. Mg.....mg/dl (1.6-2.6mg/dl)  
 S. GGT.....U/L (40-70 U/L)  
 CSF Glucose.....mg/dl  
 CSF Protein.....mg/dl

\*S/NPT value put in (1:10) Dilution  
 Verified by..... Consultant.....

C  
 WBC  
 H



3.58 PLT 155-366.  
 15.9 MPV 6.90-10.6  
 33.7  
 36.0  
 31.2  
 35.4  
 14.5

INTERPRETATION

-----WBC-----RBC-----PLT-----  
 SUSPECTED ABNORMAL POPULATIONS:  
 WBC Count Alert  
 WBC Diff Alert  
 Variant Lymphocytes  
 Nucleated RBC  
 Resistant RBC  
 RBC Morphology

USER DEFINED ABNORMALITIES:

Leukocytosis  
 Lymphocytosis  
 Monocytosis  
 Basophilia  
 Anemia  
 Hypochromic  
 Anisocytosis  
 Thrombocytopenia  
 Macrocytic PLT