

# CITY HOSPITAL LABORATORY

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## PATIENT LABORATORY REPORT

Name: Muhammad Ahmed Khan

Age: 35 Years Gender: Male

Patient ID: CH-2025-001234

Date of Collection: January 15, 2025 Date of Report: January 16, 2025

Referring Physician: Dr. Sarah Malik

### COMPLETE BLOOD COUNT (CBC)

TEST NAME	RESULT	NORMAL RANGE	UNIT
Hemoglobin	13.2	13.5-17.5	g/dL
Total WBC Count	11.5 (H)	4.0-11.0	$\times 10^3/\mu\text{L}$
RBC Count	4.8	4.5-5.5	$\times 10^6/\mu\text{L}$
Hematocrit	41.2	40-50	%
MCV	85.8	80-100	fL
MCH	27.5	27-32	pg
MCHC	32.1	32-36	g/dL
Platelet Count	245	150-400	$\times 10^3/\mu\text{L}$
Neutrophils	68	40-75	%
Lymphocytes	25	20-45	%
Monocytes	5	2-10	%
Eosinophils	2	1-6	%
Basophils	0	0-1	%

### LIPID PROFILE

TEST NAME	RESULT	NORMAL RANGE	UNIT
Total Cholesterol	220 (H)	<200	mg/dL
Triglycerides	165	<150	mg/dL
HDL Cholesterol	42 (L)	>40	mg/dL

TEST NAME	RESULT	NORMAL RANGE	UNIT
LDL Cholesterol	145 (H)	<100	mg/dL
VLDL Cholesterol	33	<30	mg/dL
Cholesterol/HDL Ratio	5.2 (H)	<4.5	

LIVER FUNCTION TEST

TEST NAME	RESULT	NORMAL RANGE	UNIT
Total Bilirubin	0.9	0.3-1.2	mg/dL
Direct Bilirubin	0.3	0.1-0.3	mg/dL
Indirect Bilirubin	0.6	0.2-0.9	mg/dL
SGPT (ALT)	45 (H)	7-40	U/L
SGOT (AST)	38	10-40	U/L
Alkaline Phosphatase	95	44-147	U/L
Total Protein	7.2	6.0-8.0	g/dL
Albumin	4.1	3.5-5.5	g/dL
Globulin	3.1	2.0-3.5	g/dL
A/G Ratio	1.32	1.0-2.0	

KIDNEY FUNCTION TEST

TEST NAME	RESULT	NORMAL RANGE	UNIT
Blood Urea Nitrogen	15	7-20	mg/dL
Creatinine	1.0	0.7-1.3	mg/dL
Uric Acid	6.2	3.5-7.2	mg/dL
Sodium (Na <sup>+</sup> )	140	136-145	mmol/L
Potassium (K <sup>+</sup> )	4.2	3.5-5.1	mmol/L
Chloride (Cl <sup>-</sup> )	102	98-107	mmol/L

BLOOD GLUCOSE TEST

TEST NAME	RESULT	NORMAL RANGE	UNIT
Fasting Blood Sugar	118 (H)	70-100	mg/dL
HbA1c	6.2 (H)	<5.7	%

THYROID FUNCTION TEST
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TEST NAME	RESULT	NORMAL RANGE	UNIT
TSH	3.8	0.4-4.0	mIU/L
Free T3	3.2	2.0-4.4	pg/mL
Free T4	1.3	0.9-1.7	ng/dL

REMARKS :

- Elevated WBC count - may indicate infection or inflammation
- Lipid profile shows elevated total cholesterol and LDL
- Low HDL cholesterol - cardiovascular risk factor
- Slightly elevated SGPT - monitor liver function
- Fasting blood sugar indicates prediabetic range
- HbA1c suggests impaired glucose tolerance

RECOMMENDATIONS :

- Dietary modifications - reduce saturated fats and refined sugars
- Regular exercise - at least 30 minutes daily
- Repeat lipid profile and glucose tests after 3 months
- Consider diabetes screening
- Follow up with physician for detailed evaluation

Laboratory Director: Dr. Imran Hassan, FCPS (Pathology)

Digital Signature: Verified

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