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NAME	**: Mrs. RAVINDER KAUR**		
AGE/ GENDER	: 44 YRS/FEMALE	**PATIENT ID**	: 1812705
COLLECTED BY	: SURJESH	**REG. NO./LAB NO.**	**: 012503310066**
REFERRED BY	: LOOMBA HOSPITAL (AMBALA CANTT)	**REGISTRATION DATE**	: 31/Mar/2025 02:56 PM
BARCODE NO.	: 01528099	**COLLECTION DATE**	: 31/Mar/2025 02:57PM
CLIENT CODE.	: KOS DIAGNOSTIC LAB	**REPORTING DATE**	: 31/Mar/2025 03:07PM
CLIENT ADDRESS	: 6349/1, NICHOLSON ROAD, AMBALA CANTT		

Test Name	Value	Unit	Biological Reference interval

HAEMATOLOGY

HAEMOGLOBIN (HB)

HAEMOGLOBIN (HB) *by CALORIMETRIC*	**10.6**^{L}	gm/dL	12.0 - 16.0

INTERPRETATION:-

Hemoglobin is the protein molecule in red blood cells that carries oxygen from the lungs to the bodys tissues and returns carbon dioxide from the tissues back to the lungs.

A low hemoglobin level is referred to as ANEMIA or low red blood count.

ANEMIA (DECRESED HAEMOGLOBIN):

1) Loss of blood (traumatic injury, surgery, bleeding, colon cancer or stomach ulcer)
2) Nutritional deficiency (iron, vitamin B12, folate)
3) Bone marrow problems (replacement of bone marrow by cancer)
4) Suppression by red blood cell synthesis by chemotherapy drugs
5) Kidney failure
6) Abnormal hemoglobin structure (sickle cell anemia or thalassemia).

POLYCYTHEMIA (INCREASED HAEMOGLOBIN):

1) People in higher altitudes (Physiological)
2) Smoking (Secondary Polycythemia)
3) Dehydration produces a falsely rise in hemoglobin due to increased haemoconcentration
4) Advanced lung disease (for example, emphysema)
5) Certain tumors
6) A disorder of the bone marrow known as polycythemia rubra vera,
7) Abuse of the drug erythropoetin (Epogen) by athletes for blood doping purposes (increasing the amount of oxygen available to the body by chemically raising the production of red blood cells).

NOTE: TEST CONDUCTED ON EDTA WHOLE BLOOD

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GLYCOSYLATED HAEMOGLOBIN (HBA1C)

Test Name	Value	Unit	Biological Reference interval
GLYCOSYLATED HAEMOGLOBIN (HbA1c): WHOLE BLOOD *by HPLC (HIGH PERFORMANCE LIQUID CHROMATOGRAPHY)*	4.6	%	4.0 - 6.4
ESTIMATED AVERAGE PLASMA GLUCOSE *by HPLC (HIGH PERFORMANCE LIQUID CHROMATOGRAPHY)*	85.32	mg/dL	60.00 - 140.00

INTERPRETATION:

AS PER AMERICAN DIABETES ASSOCIATION (ADA):		
REFERENCE GROUP	**GLYCOSYLATED HEMOGLOGIB (HBAIC) in %**	
Non diabetic Adults >= 18 years	<5.7	
At Risk (Prediabetes)	5.7 – 6.4	
Diagnosing Diabetes	>= 6.5	
Therapeutic goals for glycemic control	**Age > 19 Years**	
	Goals of Therapy:	< 7.0
	Actions Suggested:	>8.0
	Age < 19 Years	
	Goal of therapy:	<7.5

COMMENTS:

1.Glycosylated hemoglobin (HbA1c) test is three monthly monitoring done to assess compliace with therapeutic regimen in diabetic patients.

2.Since Hb1c reflects long term fluctuations in blood glucose concentration, a diabetic patient who has recently under good control may still have high concentration of HbAIc. Converse is true for a diabetic previously under good control but now poorly controlled.

3.Target goals of < 7.0 % may be beneficial in patients with short duration of diabetes, long life expectancy and no significant cardiovascular disease. In patients with significant complications of diabetes, limited life expectancy or extensive co-morbid conditions, targetting a goal of < 7.0% may not be appropiate.

*4.*High HbA1c (>9.0 -9.5 %) is strongly associated with risk of development and rapid progression of microvascular and nerve complications

5.Any condition that shorten RBC life span like acute blood loss, hemolytic anemia falsely lower HbA1c results.

6.HbA1c results from patients with HbSS,HbSC and HbD must be interpreted with caution , given the pathological processes including anemia,increased red cell turnover, and transfusion requirement that adversely impact HbA1c as a marker of long-term gycemic control.

7.Specimens from patients with polycythemia or post-splenctomy may exhibit increse in HbA1c values due to a somewhat longer life span of the red cells.

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Test Name	Value	Unit	Biological Reference interval
BLEEDING TIME (BT)			
BLEEDING TIME (BT) *by DUKE METHOD*	2 MIN 15 SEC	MINS	1 - 5

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Test Name	Value	Unit	Biological Reference interval
CLOTTING TIME (CT)			
CLOTTING TIME (CT) *by CAPILLARY TUBE METHOD*	5 MIN 50 SEC	MINS	4 - 9

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CLIENT CODE.	: KOS DIAGNOSTIC LAB	**REPORTING DATE**	: 31/Mar/2025 04:04PM
CLIENT ADDRESS	: 6349/1, NICHOLSON ROAD, AMBALA CANTT		

Test Name	Value	Unit	Biological Reference interval

IMMUNOPATHOLOGY/SEROLOGY

HEPATITIS C VIRUS (HCV) ANTIBODY: TOTAL

HEPATITIS C ANTIBODY (HCV) TOTAL: SERUM *by CMIA (CHEMILUMINESCENT MICROPARTICLE IMMUNOASSAY)*	0.1	S/CO	NEGATIVE: < 1.00 POSITIVE: > 1.00
HEPATITIS C ANTIBODY (HCV) TOTAL RESULT *by CMIA (CHEMILUMINESCENT MICROPARTICLE IMMUNOASSAY)*	NON - REACTIVE		

INTERPRETATION:-

RESULT (INDEX)	REMARKS
< 1.00	NON - REACTIVE/NOT - DETECTED
> =1.00	REACTIVE/ASYMPTOMATIC/INFECTIVE STATE/CARRIER STATE.

Hepatitis C (HCV) is an RNA virus of Favivirus group transmitted via blood transfusions, transplantation, injection drug abusers, accidental needle punctures in healthcare workers, dialysis patients and rarely from mother to infant. 10 % of new cases show sexual transmission. As compared to HAV & HBV , chronic infection with HCV occurs in 85 % of infected individuals. In high risk population, the predictive value of Anti HCV for HCV infection is > 99% whereas in low risk populations it is only 25 %.

USES:

1. Indicator of past or present infection, but does not differentiate between Acute/ Chronic/Resolved Infection.
2. Routine screening of low and high prevelance population including blood donors.

NOTE:

1. False positive results are seen in Auto-immune disease, Rheumatoid Factor, HYpergammaglobulinemia, Paraproteinemia, Passive antibody transfer, Anti-idiotypes and Anti-superoxide dismutase.
2. False negative results are seen in early Acute infection, Immunosuppression and Immuno—incompetence.
3. *HCV-RNA PCR recommended in all reactive results to differentiate between past and present infection.*

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Test Name	Value	Unit	Biological Reference interval

ANTI HUMAN IMMUNODEFICIENCY VIRUS (HIV) DUO ULTRA WITH (P-24 ANTIGEN DETECTION)

HIV 1/2 AND P24 ANTIGEN: SERUM *by CMIA (CHEMILUMINESCENT MICROPARTICLE IMMUNOASSAY)*	0.15	S/CO	NEGATIVE: < 1.00 POSITIVE: > 1.00
HIV 1/2 AND P24 ANTIGEN RESULT *by CMIA (CHEMILUMINESCENT MICROPARTICLE IMMUNOASSAY)*	NON - REACTIVE		

INTERPRETATION:-

RESULT (INDEX)	REMARKS
< 1.00	NON - REACTIVE
> = 1.00	PROVISIONALLY REACTIVE

Non-Reactive result implies that antibodies to HIV 1/ 2 have not been detected in the sample . This menas that patient has either not been exposed to HIV 1/ 2 infection or the sample has been tested during the "window phase" i.e. before the development of detectable levels of antibodies. Hence a Non Reactive result does not exclude the possibility of exposure or infection with HIV 1/ 2.

RECOMMENDATIONS:

1. Results to be clinically correlated
2. Rarely falsenegativity/positivity may occur.

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CLIENT CODE.	: KOS DIAGNOSTIC LAB	**REPORTING DATE**	: 01/Apr/2025 09:14AM
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Test Name	Value	Unit	Biological Reference interval

HERPES SIMPLEX VIRUS (HSV) - 1 EVALUATION IgG AND IgM

HERPES SIMPLEX VIRUS (HSV) - 1 ANTIBODIES IgG *by CLIA (CHEMILUMINESCENCE IMMUNOASSAY)*	0.685	AU/mL	NEGATIVE: < 2.0 POSITIVE: > 2.0
HERPES SIMPLEX VIRUS (HSV) - 1 ANTIBODIES IgM *by CLIA (CHEMILUMINESCENCE IMMUNOASSAY)*	1	AU/mL	NEGATIVE: < 4.0 POSITIVE: > 4.0

INTERPRETATION:

1. Herpes Simplex Virus (HSV) is a widespread human pathogen with a tendency to induce lifelong latency in the sensory nerve ganglia, following the primary infection. Recurrent HSV infections are common due to endogeneous reactivation of the virus. Precipitating factors for recurrence can include exposure to sunlight, fever , local trauma, trigeminal nerve manipulation, menstruation and emotional stress. HSV-1 and HSV-2 are 2 serologically distinguishable types. Hsv-1 is primarily transmitted by contact with oral secretions and is usually associated with oral infections and lesions above waist. HSV-2, on the other hand, is primarily transmitted by contact with genital secretions and is associated with genital infections and lesions below the waist. However the correlation between HSV type and location of the lesion is not absolute. Transmission can occur from overtly infected persons as well as asymptomatic excretors. HSV is known to cause severe generalized and fatal infections in newborns and immunocompromised people.
2. Pregnant women who develop genital hrpes are two-three times more likely to have spontaneous abortions or deliver a premature infant that are pregnant non-infected women. Active virus excreation in genital secretionsof pregnant women may result in severe neonatal HSV infection that is associated with high morbidity and mortality rates if untreated.

TEST UTILITY:

HSV specific IgM becomes detectable aftr about 1 week of infection. Presence of IgM usually indicates recent or active recurrent infection. Specific IgG generally appears 2-3 after primary infection, but may fall in titer after a few months. Sero-conversion of HSV-specific IgG from negative to positive also suggests recent or active recurrent infection. However some patients with recurring disease may not show an increase in titer. Detection of IgG allows assessment of patients immune status and provide serological evidence of prior exposure to HSV. *TESTING PAIRED SERA TO DEMONSTRATE SEROCONVERSION IS RECOMMENDED FOR ACCURATE DIAGNOSIS OF RECENT (PRIMARY OR RECURRENT) HSV INFECTION.*

LIMITATIONS:

Due to high seroprevalence of various community-related infectious disease in the general Indian population, all results must be interpreted in context of the total clinical history and supplementary findings of other investigative procedure. Due to strong serological cross-reactivity between HSV-1 and HSV-2, antibodies produced in response to infection by one virus can cross react with other, through the response to the homologous, i.e, the infection virus is generally greater. For this reason, testing paired acute/covalescent specimens is useful to show change in antbody activity. Patients with intermediate results should be tested with another sample taken 1-2 weeks after the first, if clinically indicated.

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Test Name	Value	Unit	Biological Reference interval

HEPATITIS B SURFACE ANTIGEN (HBsAg) ULTRA

HEPATITIS B SURFACE ANTIGEN (HBsAg): SERUM	0.21	S/CO	NEGATIVE: < 1.0 POSITIVE: > 1.0
by CMIA (CHEMILUMINESCENT MICROPARTICLE IMMUNOASSAY)			
HEPATITIS B SURFACE ANTIGEN (HBsAg) RESULT	NON REACTIVE		
by CMIA (CHEMILUMINESCENT MICROPARTICLE IMMUNOASSAY)			

INTERPRETATION:

RESULT IN INDEX VALUE	REMARKS
< 1.30	NEGATIVE (-ve)
>=1.30	POSITIVE (+ve)

Hepatitis B Virus (HBV) is a member of the Hepadna virus family causing infection of the liver with extremely variable clinical features. Hepatitis B is transmitted primarily by body fluids especially serum and also spread effectively sexually and from mother to baby. In most individuals HBV hepatitis is self limiting, but 1-2 % normal adolescent and adults develop Chronic Hepatitis. Frequency of chronic HBV infection is 5-10% in immunocompromised patients and 80 % neonates. The initial serological marker of acute infection is HBsAg which typically appears 2-3 months after infection and disappears 12-20 weeks after onset of symtoms. Persistence of HBsAg for more than 6 months indicates carrier state or Chronic Liver disease.

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Test Name	Value	Unit	Biological Reference interval

VDRL

VDRL *by IMMUNOCHROMATOGRAPHY*	NON REACTIVE		NON REACTIVE

INTERPRETATION:

1.Does not become positive until 7 - 10 days after appearance ofchancre.
2.***High titer (>1:16) - active disease.***
3.***Low titer (<1:8) - biological falsepositive test in 90% cases or due to late or late latent syphillis.***
4.Treatment of primary syphillis causes progressive decline tonegative VDRL within 2 years.
5.Rising titer (4X) indicates relapse,reinfection, or treatment failure and need for retreatment.
6.May benonreactive in early primary, late latent, and late syphillis (approx. 25% ofcases).
7.Reactive and weakly reactive tests should always be confirmedwith FTA-ABS (fluorescent treponemal antibody absorptiontest).

SHORTTERM FALSE POSITIVE TEST RESULTS (<6 MONTHS DURATION) MAY OCCURIN:

1.Acute viral illnesses (e.g., hepatitis, measles, infectious mononucleosis)
2.M. pneumoniae; Chlamydia; Malaria infection.
3.Some immunizations
4.Pregnancy (rare)

LONGTERM FALSE POSITIVE TEST RESULTS (>6 MONTHS DURATION) MAY OCCUR IN:

1.Serious underlying disease e.g., collagen vascular diseases, leprosy ,malignancy.
2.Intravenous drug users.
3.Rheumatoid arthritis, thyroiditis, AIDS, Sjogren's syndrome.
4.<l0 % of patients older thanage 70 years.
5.Patients taking some anti-hypertensive drugs.

*** End Of Report ***

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