



P K R JAIN HEALTHCARE INSTITUTE

NASIRPUR, Hissar Road, AMBALA CITY- (Haryana)

A PIONEER DIAGNOSTIC CENTRE

☎ 0171-2532620, 8222896961 ✉ pkrjainhealthcare@gmail.com

TEST PERFORMED AT KOS DIAGNOSTIC LAB, AMBALA CANTT.

NAME	: Mr. SATISH KUMAR		
AGE/ GENDER	: 52 YRS/MALE	PATIENT ID	: 1733522
COLLECTED BY	:	REG. NO./LAB NO.	: 122501240021
REFERRED BY	:	REGISTRATION DATE	: 24/Jan/2025 12:14 PM
BARCODE NO.	: 12506668	COLLECTION DATE	: 24/Jan/2025 12:19PM
CLIENT CODE.	: P.K.R JAIN HEALTHCARE INSTITUTE	REPORTING DATE	: 24/Jan/2025 01:37PM
CLIENT ADDRESS	: NASIRPUR, HISSAR ROAD, AMBALA CITY - HARYANA		

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

HAEMATOLOGY

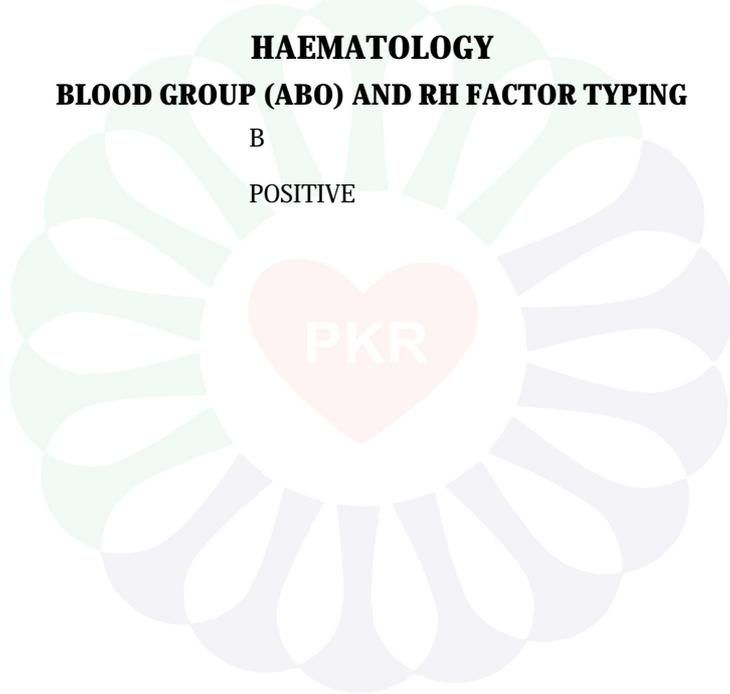
BLOOD GROUP (ABO) AND RH FACTOR TYPING

ABO GROUP
by SLIDE AGGLUTINATION

RH FACTOR TYPE
by SLIDE AGGLUTINATION

B

POSITIVE



DR.VINAY CHOPRA
CONSULTANT PATHOLOGIST
MBBS, MD (PATHOLOGY & MICROBIOLOGY)

DR.YUGAM CHOPRA
CONSULTANT PATHOLOGIST
MBBS , MD (PATHOLOGY)





P K R JAIN HEALTHCARE INSTITUTE

NASIRPUR, Hissar Road, AMBALA CITY- (Haryana)

A PIONEER DIAGNOSTIC CENTRE

☎ 0171-2532620, 8222896961 ✉ pkrjainhealthcare@gmail.com

TEST PERFORMED AT KOS DIAGNOSTIC LAB, AMBALA CANTT.

NAME	: Mr. SATISH KUMAR		
AGE/ GENDER	: 52 YRS/MALE	PATIENT ID	: 1733522
COLLECTED BY	:	REG. NO./LAB NO.	: 122501240021
REFERRED BY	:	REGISTRATION DATE	: 24/Jan/2025 09:16 PM
BARCODE NO.	: 12506668	COLLECTION DATE	: 24/Jan/2025 09:17PM
CLIENT CODE.	: P.K.R JAIN HEALTHCARE INSTITUTE	REPORTING DATE	: 25/Jan/2025 04:43PM
CLIENT ADDRESS	: NASIRPUR, HISSAR ROAD, AMBALA CITY - HARYANA		

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

CLINICAL CHEMISTRY/BIOCHEMISTRY

GLOMERULAR FILTRATION RATE (GFR) - ESTIMATED

ESTIMATED GLOMERULAR FILTRATION RATE **6^L** mL/min/1.73m² KIDNEY FAILURE: < 15.0

(eGFR): SERUM

by SPECTROPHOTOMETRY-ENZYMATIC, MDRD CALCULATION

INTERPRETATION:

CKD STAGE	DESCRIPTION	GFR (mL/min/1.73m ²)	ASSOCIATED FINDINGS
G1	Normal kidney function	>90	No proteinuria
G2	Kidney damage with normal or high GFR	>90	Presence of Protein , Albumin or cast in urine
G3a	Mild decrease in GFR	60 -89	
G3b	Moderate decrease in GFR	30-59	
G4	Severe decrease in GFR	15-29	
G5	Kidney failure	<15	

COMMENTS:

1. Estimated Glomerular filtration rate (eGFR) is the sum of filtration rates in all functioning nephrons and so an estimation of the GFR provides a measure of functioning nephrons of the kidney.
2. eGFR calculated using the 2009 CKD-EPI creatinine equation and GFR category reported as per KDIGO guideline 2012
3. In patients, with eGFR creatinine between 45-59 ml/min/1.73 m² (G3) and without any marker of Kidney damage, It is recommended to measure eGFR with Cystatin C for confirmation of CKD
4. eGFR category G1 OR G2 does not fulfill the criteria for CKD, in the absence of evidence of Kidney Damage
5. In a suspected case of Acute Kidney Injury (AKI), measurement of eGFR should be done after 48-96 hours of any Intervention or procedure
6. eGFR calculated by Serum Creatinine may be less accurate due to certain factors like Race, Muscle Mass, Diet, Certain Drugs. In such cases, eGFR should be calculated using Serum Cystatin C
7. **A decrease in eGFR implies either progressive renal disease, or a reversible process causing decreased nephron function (eg, severe dehydration).**

ADVICE:

KDIGO guideline, 2012 recommends Chronic Kidney Disease (CKD) should be classified based on cause, eGFR category and Albuminuria (ACR) category. GFR & ACR category combined together reflect risk of progression and helps Clinician to identify the individual who are progressing at more rapid rate than anticipated

NOTE-By CKD-EPI CREATININE CYSTATIN C Equation.



DR.VINAY CHOPRA
CONSULTANT PATHOLOGIST
MBBS, MD (PATHOLOGY & MICROBIOLOGY)

DR.YUGAM CHOPRA
CONSULTANT PATHOLOGIST
MBBS , MD (PATHOLOGY)





P K R JAIN HEALTHCARE INSTITUTE

NASIRPUR, Hissar Road, AMBALA CITY- (Haryana)

A PIONEER DIAGNOSTIC CENTRE

☎ 0171-2532620, 8222896961 ✉ pkrjainhealthcare@gmail.com

TEST PERFORMED AT KOS DIAGNOSTIC LAB, AMBALA CANTT.

NAME	: Mr. SATISH KUMAR		
AGE/ GENDER	: 52 YRS/MALE	PATIENT ID	: 1733522
COLLECTED BY	:	REG. NO./LAB NO.	: 122501240021
REFERRED BY	:	REGISTRATION DATE	: 24/Jan/2025 01:25 PM
BARCODE NO.	: 12506668	COLLECTION DATE	: 24/Jan/2025 01:26PM
CLIENT CODE.	: P.K.R JAIN HEALTHCARE INSTITUTE	REPORTING DATE	: 25/Jan/2025 10:44AM
CLIENT ADDRESS	: NASIRPUR, HISSAR ROAD, AMBALA CITY - HARYANA		

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

CYSTATIN C

CYSTATIN C: SERUM

5.29^H

mg/L

<= 60 years: <= 1.03 mg/L
> 60 years : < 1.50 mg/L

INTERPRETATION:

NOTE:

1. Glucocorticoids reduce production of Cystatin C which may result in overestimation of renal function in renal transplant patients who are regularly given glucocorticoids.
2. Thyroid dysfunction may affect Cystatin C concentration

COMMENTS

Cystatin C, an amino acid protein is an inhibitor of cysteine proteinase. It is produced by all nucleated cells and the production is relatively constant from the age of 4 months to 70 years and is proportionate to glomerular filtration rate (GFR). The rate of production is not affected by muscle mass, sex, race & diet. It is freely filtered by the glomerulus at the same concentration as plasma and is reabsorbed by the proximal tubules. Hence appearance of Cystatin C signifies proximal tubular damage. Serum Cystatin C is a better indicator of renal function than creatinine in the early stages of GFR impairment.

CLINICAL USE

1. To diagnose renal impairment in early stages



DR.VINAY CHOPRA
CONSULTANT PATHOLOGIST
MBBS, MD (PATHOLOGY & MICROBIOLOGY)

DR.YUGAM CHOPRA
CONSULTANT PATHOLOGIST
MBBS , MD (PATHOLOGY)





P K R JAIN HEALTHCARE INSTITUTE

NASIRPUR, Hissar Road, AMBALA CITY- (Haryana)

A PIONEER DIAGNOSTIC CENTRE

☎ 0171-2532620, 8222896961 ✉ pkrjainhealthcare@gmail.com

TEST PERFORMED AT KOS DIAGNOSTIC LAB, AMBALA CANTT.

NAME	: Mr. SATISH KUMAR		
AGE/ GENDER	: 52 YRS/MALE	PATIENT ID	: 1733522
COLLECTED BY	:	REG. NO./LAB NO.	: 122501240021
REFERRED BY	:	REGISTRATION DATE	: 24/Jan/2025 12:14 PM
BARCODE NO.	: 12506668	COLLECTION DATE	: 24/Jan/2025 12:19PM
CLIENT CODE.	: P.K.R JAIN HEALTHCARE INSTITUTE	REPORTING DATE	: 24/Jan/2025 01:37PM
CLIENT ADDRESS	: NASIRPUR, HISSAR ROAD, AMBALA CITY - HARYANA		

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

IMMUNOPATHOLOGY/SEROLOGY

HEPATITIS C VIRUS (HCV) ANTIBODIES SCREENING

HEPATITIS C ANTIBODY (HCV) TOTAL NON - REACTIVE

RESULT
by IMMUNOCHROMATOGRAPHY

INTERPRETATION:

1. Anti HCV total antibody assay identifies presence IgG antibodies in the serum . It is a useful screening test with a specificity of nearly 99%.
2. It becomes positive approximately 24 weeks after exposure. The test can not isolate an active ongoing HCV infection from an old infection that has been cleared. All positive results must be confirmed for active disease by an HCV PCR test .

FALSE NEGATIVE RESULTS SEEN IN:

1. Window period
2. Immunocompromised states.



DR.VINAY CHOPRA
CONSULTANT PATHOLOGIST
MBBS, MD (PATHOLOGY & MICROBIOLOGY)

DR.YUGAM CHOPRA
CONSULTANT PATHOLOGIST
MBBS , MD (PATHOLOGY)





P K R JAIN HEALTHCARE INSTITUTE

NASIRPUR, Hissar Road, AMBALA CITY- (Haryana)

A PIONEER DIAGNOSTIC CENTRE

☎ 0171-2532620, 8222896961 ✉ pkrjainhealthcare@gmail.com

TEST PERFORMED AT KOS DIAGNOSTIC LAB, AMBALA CANTT.

NAME	: Mr. SATISH KUMAR		
AGE/ GENDER	: 52 YRS/MALE	PATIENT ID	: 1733522
COLLECTED BY	:	REG. NO./LAB NO.	: 122501240021
REFERRED BY	:	REGISTRATION DATE	: 24/Jan/2025 12:14 PM
BARCODE NO.	: 12506668	COLLECTION DATE	: 24/Jan/2025 12:19PM
CLIENT CODE.	: P.K.R JAIN HEALTHCARE INSTITUTE	REPORTING DATE	: 24/Jan/2025 01:37PM
CLIENT ADDRESS	: NASIRPUR, HISSAR ROAD, AMBALA CITY - HARYANA		

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

ANTI HUMAN IMMUNODEFICIENCY VIRUS (HIV) ANTIBODIES HIV (1 & 2) SCREENING

HIV 1/2 AND P24 ANTIGEN RESULT NON - REACTIVE
by IMMUNOCHROMATOGRAPHY

INTERPRETATION:-

- 1.AIDS is caused by at least 2 known types of HIV viruses, HIV-1 and HIV HIV-2.
- 2.This NACO approved immuno-chromatographic solid phase ELISA assay detects antibodies against both HIV-1 and HIV-2 viruses.
- 3.The test is used for routine serologic screening of patients at risk for HIV-1 or HIV-2 infection.
- 4.All screening ELISA assays for HIV antibody detection have high sensitivity but have low specificity.
- 5.At this laboratory, all positive samples are cross checked for positivity with two alternate assays prior to reporting.

NOTE:-

- 1.Confirmatory testing by Western blot is recommended for patients who are reactive for HIV by this assay.
- 2.Antibodies against HIV-1 and HIV-2 are usually not detectable until 6 to 12 weeks following exposure (window period) and are almost always detectable by 12 months.
- 3.The test is not recommended for children born to HIV infected mothers till the child turns two years old (as HIV antibodies may be transmitted passively to the child trans-placentally).

FALSE NEGATIVE RESULT SEEN IN:

- 1.Window period
- 2.Severe immuno-suppression including advanced AIDS.



DR.VINAY CHOPRA
CONSULTANT PATHOLOGIST
MBBS, MD (PATHOLOGY & MICROBIOLOGY)

DR.YUGAM CHOPRA
CONSULTANT PATHOLOGIST
MBBS , MD (PATHOLOGY)





P K R JAIN HEALTHCARE INSTITUTE

NASIRPUR, Hissar Road, AMBALA CITY- (Haryana)

A PIONEER DIAGNOSTIC CENTRE

☎ 0171-2532620, 8222896961 ✉ pkrjainhealthcare@gmail.com

TEST PERFORMED AT KOS DIAGNOSTIC LAB, AMBALA CANTT.

NAME	: Mr. SATISH KUMAR		
AGE/ GENDER	: 52 YRS/MALE	PATIENT ID	: 1733522
COLLECTED BY	:	REG. NO./LAB NO.	: 122501240021
REFERRED BY	:	REGISTRATION DATE	: 24/Jan/2025 12:14 PM
BARCODE NO.	: 12506668	COLLECTION DATE	: 24/Jan/2025 12:19PM
CLIENT CODE.	: P.K.R JAIN HEALTHCARE INSTITUTE	REPORTING DATE	: 24/Jan/2025 01:37PM
CLIENT ADDRESS	: NASIRPUR, HISSAR ROAD, AMBALA CITY - HARYANA		

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

HEPATITIS B SURFACE ANTIGEN (HBsAg) SCREENING

HEPATITIS B SURFACE ANTIGEN (HBsAg) NON - REACTIVE

RESULT

by IMMUNOCHROMATOGRAPHY

INTERPRETATION:-

1.HBsAG is the first serological marker of HBV infection to appear in the blood (approximately 30-60 days after infection and prior to the onset of clinical disease). It is also the last viral protein to disappear from blood and usually disappears by three months after infection in self limiting acute Hepatitis B viral infection.

2.Persistence of HBsAg in blood for more than six months implies chronic infection. It is the most common marker used for diagnosis of an acute Hepatitis B infection but has very limited role in assessing patients suffering from chronic hepatitis.

FALSE NEGATIVE RESULT SEEN IN:

- 1.Window period.
- 2.Infection with HBsAg mutant strains
- 3.Hepatitis B Surface antigen (HBsAg) is the earliest indicator of HBV infection. Usually it appears in 27 - 41 days (as early as 14 days).
- 4.Appears 7 - 26 days before biochemical abnormalities. Peaks as ALT rises. Persists during the acute illness. Usually disappears 12- 20 weeks after the onset of symptoms / laboratory abnormalities in 90% of cases.
- 5.Is the most reliable serologic marker of HBV infection. Persistence > 6 months defines carrier state. May also be found in chronic infection.Hepatitis B vaccination does not cause a positive HBsAg. Titers are not of clinical value.

NOTE:-

- 1.All reactive HBsAG Should be reconfirmed with neutralization test(HBsAg confirmatory test).
- 2.Anti - HAV IgM appears at the same time as symptoms in > 99% of cases, peaks within the first month, becomes nondetectable in 12 months (usually 6 months). Presence confirms diagnosis of recent acute infection.



DR.VINAY CHOPRA
CONSULTANT PATHOLOGIST
MBBS, MD (PATHOLOGY & MICROBIOLOGY)

DR.YUGAM CHOPRA
CONSULTANT PATHOLOGIST
MBBS , MD (PATHOLOGY)





P K R JAIN HEALTHCARE INSTITUTE

NASIRPUR, Hissar Road, AMBALA CITY- (Haryana)

A PIONEER DIAGNOSTIC CENTRE

☎ 0171-2532620, 8222896961 ✉ pkrajainhealthcare@gmail.com

TEST PERFORMED AT KOS DIAGNOSTIC LAB, AMBALA CANTT.

NAME	: Mr. SATISH KUMAR		
AGE/ GENDER	: 52 YRS/MALE	PATIENT ID	: 1733522
COLLECTED BY	:	REG. NO./LAB NO.	: 122501240021
REFERRED BY	:	REGISTRATION DATE	: 24/Jan/2025 12:14 PM
BARCODE NO.	: 12506668	COLLECTION DATE	: 24/Jan/2025 12:19PM
CLIENT CODE.	: P.K.R JAIN HEALTHCARE INSTITUTE	REPORTING DATE	: 24/Jan/2025 07:11PM
CLIENT ADDRESS	: NASIRPUR, HISSAR ROAD, AMBALA CITY - HARYANA		

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

CLINICAL PATHOLOGY

MICROALBUMIN/CREATININE RATIO - RANDOM URINE

MICROALBUMIN: RANDOM URINE <i>by SPECTROPHOTOMETRY</i>	153.8^H	mg/L	0 - 25
CREATININE: RANDOM URINE <i>by SPECTROPHOTOMETRY</i>	36.64	mg/dL	20 - 320
MICROALBUMIN/CREATININE RATIO - RANDOM URINE <i>by SPECTROPHOTOMETRY</i>	419.76^H	mg/g	0 - 30

INTERPRETATION:-

PHYSIOLOGICALLY NORMAL:	mg/L	0 - 30
MICROALBUMINURIA:	mg/L	30 - 300
GROSS PROTEINURIA:	mg/L	> 300

Long standing un-treated Diabetes and Hypertension can lead to renal dysfunction.

2. Diabetic nephropathy or kidney disease is the most common cause of end stage renal disease(ERSD) or kidney failure.

3. Presence of Microalbuminuria is an early indicator of onset of compromised renal function in these patients.

4. Microalbuminuria is the condition when urinary albumin excretion is between 30-300 mg & above this it is called as macroalbuminuria, the presence of which indicates serious kidney disease.

5. Microalbuminuria is not only associated with kidney disease but of cardiovascular disease in patients with diabetes & hypertension.

6. Microalbuminuria reflects vascular damage & appear to be a marker of early arterial disease & endothelial dysfunction.

NOTE:- IF A PATIENT HAS = 1+ PROTEINURIA (30 mg/dl OR 300 mg/L) BY URINE DIPSTICK (URINEANALYSIS), OVERT PROTEINURIA IS PRESENT AND TESTING FOR MICROALBUMIN IS INAPPROPRIATE. IN SUCH A CASE, URINE PROTEIN:CREATININE RATIO OR 24 HOURS TOTAL URINE MICROPROTEIN IS APPROPRIATE.

*** End Of Report ***



DR.VINAY CHOPRA
CONSULTANT PATHOLOGIST
MBBS, MD (PATHOLOGY & MICROBIOLOGY)

DR.YUGAM CHOPRA
CONSULTANT PATHOLOGIST
MBBS, MD (PATHOLOGY)

