

(A Unit of KOS Healthcare)



Dr. Vinay Chopra MD (Pathology & Microbiology) Chairman & Consultant Pathologist Dr. Yugam Chopra MD (Pathology) CEO & Consultant Pathologist

NAME : Mr. SURINDER KUMAR

**AGE/ GENDER**: 80 YRS/MALE **PATIENT ID**: 1709125

COLLECTED BY: SURJESH REG. NO./LAB NO. : 012412260018

 REFERRED BY
 : 26/Dec/2024 10:44 AM

 BARCODE NO.
 : 01523025
 COLLECTION DATE
 : 26/Dec/2024 11:07 AM

 CLIENT CODE.
 : KOS DIAGNOSTIC LAB
 REPORTING DATE
 : 26/Dec/2024 11:26 AM

**CLIENT ADDRESS**: 6349/1, NICHOLSON ROAD, AMBALA CANTT

Test Name Value Unit Biological Reference interval

### SWASTHYA WELLNESS PANEL: 1.0 COMPLETE BLOOD COUNT (CBC)

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

| HAEMOGLOBIN (HB) by CALORIMETRIC  | 12.2            | gm/dL        | 12.0 - 17.0  |
|---|-----------------|--------------|--|
| RED BLOOD CELL (RBC) COUNT by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE              | 3.96            | Millions/cmm | 3.50 - 5.00  |
| PACKED CELL VOLUME (PCV) by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER                 | 38 <sup>L</sup> | %            | 40.0 - 54.0  |
| MEAN CORPUSCULAR VOLUME (MCV) by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER            | 95.9            | fL           | 80.0 - 100.0   |
| MEAN CORPUSCULAR HAEMOGLOBIN (MCH) by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER       | 30.7            | pg           | 27.0 - 34.0  |
| MEAN CORPUSCULAR HEMOGLOBIN CONC. (MCHC) by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER | 32              | 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     | 48.4            | fL           | 35.0 - 56.0  |
| MENTZERS INDEX by CALCULATED  | 24.22           | RATIO        | BETA THALASSEMIA TRAIT: < 13.0<br>IRON DEFICIENCY ANEMIA: >13.0  |
| GREEN & KING INDEX by CALCULATED  | 32.58           | RATIO        | BETA THALASSEMIA TRAIT:<= 65.0<br>IRON DEFICIENCY ANEMIA: > 65.0 |
| WHITE BLOOD CELLS (WBCS)  |                 |              |  |
| TOTAL LEUCOCYTE COUNT (TLC) by Flow cytometry by SF cube & microscopy                   | 8460            | /cmm         | 4000 - 11000   |
| NUCLEATED RED BLOOD CELLS (nRBCS) by automated 6 part hematology analyzer               | NIL             |              | 0.00 - 20.00   |
| NUCLEATED RED BLOOD CELLS (nRBCS) %   | NIL             | %            | < 10 %   |



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by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER



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|---|-----------------------------|----------|-------------------------------|--|--|
| DIFFERENTIAL LEUCOCYTE COUNT (DLC)  |                             |          |                               |  |  |
| NEUTROPHILS   | 55                          | %        | 50 - 70                       |  |  |
| by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY   |                             |          |                               |  |  |
| LYMPHOCYTES by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY                             | 28                          | %        | 20 - 40                       |  |  |
| EOSINOPHILS   | 5                           | %        | 1 - 6                         |  |  |
| by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY   |                             | , ,      |                               |  |  |
| MONOCYTES   | 12 <sup>H</sup>             | %        | 2 - 12                        |  |  |
| by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY   |                             | 0.4      |                               |  |  |
| BASOPHILS by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY                               | 0                           | %        | 0 - 1                         |  |  |
| ABSOLUTE LEUKOCYTES (WBC) COUNT   |                             |          |                               |  |  |
| ABSOLUTE NEUTROPHIL COUNT   | 4653                        | /cmm     | 2000 - 7500                   |  |  |
| by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY   | 4000                        | / CHIIII | 2000 7000                     |  |  |
| ABSOLUTE LYMPHOCYTE COUNT   | 2369                        | /cmm     | 800 - 4900                    |  |  |
| by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY   |                             |          |                               |  |  |
| ABSOLUTE EOSINOPHIL COUNT   | 423                         | /cmm     | 40 - 440                      |  |  |
| by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY ABSOLUTE MONOCYTE COUNT                 | U                           | /cmm     | 80 - 880                      |  |  |
| by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY   | 1015 <sup>H</sup>           | / CIIIII | ou - oou                      |  |  |
| ABSOLUTE BASOPHIL COUNT   | 0                           | /cmm     | 0 - 110                       |  |  |
| by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY   |                             |          |                               |  |  |
| PLATELETS AND OTHER PLATELET PREDICTIVE   | MARKERS.                    |          |                               |  |  |
| PLATELET COUNT (PLT)  | $123000^{L}$                | /cmm     | 150000 - 450000               |  |  |
| by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE                                   | 0.10                        | 0/       | 0.10, 0.00                    |  |  |
| PLATELETCRIT (PCT) by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE                | 0.18                        | %        | 0.10 - 0.36                   |  |  |
| MEAN PLATELET VOLUME (MPV)  | 15 <sup>H</sup>             | fL       | 6.50 - 12.0                   |  |  |
| by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE                                   | 13                          |          | 0.00 12.0                     |  |  |
| PLATELET LARGE CELL COUNT (P-LCC)   | 75000                       | /cmm     | 30000 - 90000                 |  |  |
| by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE                                   |                             |          |                               |  |  |
| PLATELET LARGE CELL RATIO (P-LCR)   | 60.5 <sup>H</sup>           | %        | 11.0 - 45.0                   |  |  |
| by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE PLATELET DISTRIBUTION WIDTH (PDW) | 16.2                        | %        | 15.0 - 17.0                   |  |  |
| by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE                                   | 10.2                        | /0       | 13.0 - 17.0                   |  |  |
| ADVICE  | KINDLY CORRELATE CLINICALLY |          |                               |  |  |



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NOTE: TEST CONDUCTED ON EDTA WHOLE BLOOD

RECHECKED.

CLIENT CODE.



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### **ERYTHROCYTE SEDIMENTATION RATE (ESR)**

ERYTHROCYTE SEDIMENTATION RATE (ESR)

mm/1st hr

by RED CELL AGGREGATION BY CAPILLARY PHOTOMETRY

#### INTERPRETATION:

- 1. ESR is a non-specific test because an elevated result often indicates the presence of inflammation associated with infection, cancer and auto-immune disease, but does not tell the health practitioner exactly where the inflammation is in the body or what is causing it.

  2. An ESR can be affected by other conditions besides inflammation. For this reason, the ESR is typically used in conjunction with other test such
- as C-reactive protein
- 3. This test may also be used to monitor disease activity and response to therapy in both of the above diseases as well as some others, such as systemic lupus erythematosus
  CONDITION WITH LOW ESR

A low ESR can be seen with conditions that inhibit the normal sedimentation of red blood cells, such as a high red blood cell count (polycythaemia), significantly high white blood cell count (leucocytosis), and some protein abnormalities. Some changes in red cell shape (such as sickle cells in sickle cell anaemia) also lower the ESR.

NOTE:

- ESR and C reactive protein (C-RP) are both markers of inflammation.
   Generally, ESR does not change as rapidly as does CRP, either at the start of inflammation or as it resolves.
   CRP is not affected by as many other factors as is ESR, making it a better marker of inflammation.
   If the ESR is elevated, it is typically a result of two types of proteins, globulins or fibrinogen.
   Women tend to have a higher ESR, and menstruation and pregnancy can cause temporary elevations.
   Progs such as doubtern mathyldona, oral contracentives, popicillamino procesingmide, the only viling, and vitality in the orange of the contracentives.

- 6. Drugs such as dextran, methyldopa, oral contraceptives, penicillamine procainamide, theophylline, and vitamin A can increase ESR, while aspirin, cortisone, and quinine may decrease it



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### **CLINICAL CHEMISTRY/BIOCHEMISTRY GLUCOSE FASTING (F)**

GLUCOSE FASTING (F): PLASMA NORMAL: < 100.0 102.43<sup>H</sup> mg/dL

by GLUCOSE OXIDASE - PEROXIDASE (GOD-POD) PREDIABETIC: 100.0 - 125.0

DIABETIC: > 0R = 126.0

INTERPRETATION
IN ACCORDANCE WITH AMERICAN DIABETES ASSOCIATION GUIDELINES:

1. A fasting plasma glucose level below 100 mg/dl is considered normal.

2. A fasting plasma glucose level between 100 - 125 mg/dl is considered as glucose intolerant or prediabetic. A fasting and post-prandial blood

test (after consumption of 75 gms of glucose) is recommended for all such patients.

3. A fasting plasma glucose level of above 125 mg/dl is highly suggestive of diabetic state. A repeat post-prandial is strongly recommended for all such patients. A fasting plasma glucose level in excess of 125 mg/dl on both occasions is confirmatory for diabetic state.



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|--|---------------------|---------|---|
|  | LIPID PROFILE       | : BASIC |   |
| CHOLESTEROL TOTAL: SERUM by CHOLESTEROL OXIDASE PAP            | 88.82               | mg/dL   | OPTIMAL: < 200.0<br>BORDERLINE HIGH: 200.0 -<br>239.0<br>HIGH CHOLESTEROL: > OR =<br>240.0  |
| TRIGLYCERIDES: SERUM by GLYCEROL PHOSPHATE OXIDASE (ENZYMATIC) | 40.87               | mg/dL   | OPTIMAL: < 150.0<br>BORDERLINE HIGH: 150.0 -<br>199.0<br>HIGH: 200.0 - 499.0<br>VERY HIGH: > OR = 500.0                                 |
| HDL CHOLESTEROL (DIRECT): SERUM by SELECTIVE INHIBITION        | 48.9                | mg/dL   | LOW HDL: < 30.0<br>BORDERLINE HIGH HDL: 30.0 -<br>60.0<br>HIGH HDL: > OR = 60.0   |
| LDL CHOLESTEROL: SERUM by CALCULATED, SPECTROPHOTOMETRY        | 31.75               | mg/dL   | OPTIMAL: < 100.0<br>ABOVE OPTIMAL: 100.0 - 129.0<br>BORDERLINE HIGH: 130.0 -<br>159.0<br>HIGH: 160.0 - 189.0<br>VERY HIGH: > OR = 190.0 |
| NON HDL CHOLESTEROL: SERUM by CALCULATED, SPECTROPHOTOMETRY    | 39.92               | mg/dL   | OPTIMAL: < 130.0<br>ABOVE OPTIMAL: 130.0 - 159.0<br>BORDERLINE HIGH: 160.0 -<br>189.0<br>HIGH: 190.0 - 219.0<br>VERY HIGH: > OR = 220.0 |
| VLDL CHOLESTEROL: SERUM by CALCULATED, SPECTROPHOTOMETRY       | 8.17                | mg/dL   | 0.00 - 45.00  |
| TOTAL LIPIDS: SERUM by CALCULATED, SPECTROPHOTOMETRY           | 218.51 <sup>L</sup> | mg/dL   | 350.00 - 700.00   |
| CHOLESTEROL/HDL RATIO: SERUM by CALCULATED, SPECTROPHOTOMETRY  | 1.82                | RATIO   | LOW RISK: 3.30 - 4.40<br>AVERAGE RISK: 4.50 - 7.0<br>MODERATE RISK: 7.10 - 11.0<br>HIGH RISK: > 11.0                                    |



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|---|-------------------|-------|---|
| LDL/HDL RATIO: SERUM by CALCULATED, SPECTROPHOTOMETRY | 0.65              | RATIO | LOW RISK: 0.50 - 3.0<br>MODERATE RISK: 3.10 - 6.0<br>HIGH RISK: > 6.0 |
| TRIGLYCERIDES/HDL RATIO: SERUM                        | 0.84 <sup>L</sup> | RATIO | 3.00 - 5.00   |

#### **INTERPRETATION:**

1. Measurements in the same patient can show physiological analytical variations. Three serial samples 1 week apart are recommended for Total Cholesterol, Triglycerides, HDL & LDL Cholesterol.

2. As per NLA-2014 guidelines, all adults above the age of 20 years should be screened for lipid status. Selective screening of children above the age of 2 years with a family history of premature cardiovascular disease or those with at least one parent with high total cholesterol is recommended.

3. Low HDL levels are associated with increased risk for Atherosclerotic Cardiovascular disease (ASCVD) due to insufficient HDL being available

to participate in reverse cholesterol transport, the process by which cholesterol is eliminated from peripheral tissues.

4. NLA-2014 identifies Non HDL Cholesterol (an indicator of all atherogeniclipoproteins such as LDL, VLDL, IDL, Lpa, Chylomicron remnants) along with LDL-cholesterol as co- primary target for cholesterol lowering therapy. Note that major risk factors can modify treatment goals for LDL &Non

5. Additional testing for Apolipoprotein B, hsCRP,Lp(a) & LP-PLA2 should be considered among patients with moderate risk for ASCVD for risk refinement



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### **LIVER FUNCTION TEST (COMPLETE)**

| BILIRUBIN TOTAL: SERUM by DIAZOTIZATION, SPECTROPHOTOMETRY                                 | 1.01               | mg/dL | INFANT: 0.20 - 8.00<br>ADULT: 0.00 - 1.20 |
|--|--------------------|-------|---|
| BILIRUBIN DIRECT (CONJUGATED): SERUM by DIAZO MODIFIED, SPECTROPHOTOMETRY                  | 0.33               | mg/dL | 0.00 - 0.40                               |
| BILIRUBIN INDIRECT (UNCONJUGATED): SERUM by CALCULATED, SPECTROPHOTOMETRY                  | 0.68               | mg/dL | 0.10 - 1.00                               |
| SGOT/AST: SERUM<br>by IFCC, WITHOUT PYRIDOXAL PHOSPHATE                                    | 25.8               | U/L   | 7.00 - 45.00                              |
| SGPT/ALT: SERUM by IFCC, WITHOUT PYRIDOXAL PHOSPHATE                                       | 23.9               | U/L   | 0.00 - 49.00                              |
| AST/ALT RATIO: SERUM by CALCULATED, SPECTROPHOTOMETRY                                      | 1.08               | RATIO | 0.00 - 46.00                              |
| ALKALINE PHOSPHATASE: SERUM<br>by Para nitrophenyl phosphatase by amino methyl<br>propanol | 130.5 <sup>H</sup> | U/L   | 40.0 - 130.0                              |
| GAMMA GLUTAMYL TRANSFERASE (GGT): SERUM by SZASZ, SPECTROPHTOMETRY                         | 15.67              | U/L   | 0.00 - 55.0                               |
| TOTAL PROTEINS: SERUM by BIURET, SPECTROPHOTOMETRY   | 6.73               | gm/dL | 6.20 - 8.00                               |
| ALBUMIN: SERUM by Bromocresol green  | 4.64               | gm/dL | 3.50 - 5.50                               |
| GLOBULIN: SERUM by CALCULATED, SPECTROPHOTOMETRY   | 2.09 <sup>L</sup>  | gm/dL | 2.30 - 3.50                               |
| A: GRATIO: SERUM by CALCULATED, SPECTROPHOTOMETRY  | 2.22 <sup>H</sup>  | RATIO | 1.00 - 2.00                               |

#### INTERPRETATION

NOTE: To be correlated in individuals having SGOT and SGPT values higher than Normal Referance Range.

**USE**:- Differential diagnosis of diseases of hepatobiliary system and pancreas.

#### INCREASED:

| DRUG HEPATOTOXICITY                          | > 2                        |
|--|----------------------------|
| ALCOHOLIC HEPATITIS                          | > 2 (Highly Suggestive)    |
| CIRRHOSIS                                    | 1.4 - 2.0                  |
| INTRAHEPATIC CHOLESTATIS                     | > 1.5                      |
| HEPATOCELLULAR CARCINOMA & CHRONIC HEPATITIS | > 1.3 (Slightly Increased) |



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#### **DECREASED:**

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1. Acute Hepatitis due to virus, drugs, toxins (with AST increased 3 to 10 times upper limit of normal)

2. Extra Hepatic cholestatis: 0.8 (normal or slightly decreased).

#### PROGNOSTIC SIGNIFICANCE:

| NORMAL               | < 0.65    |  |
|----------------------|-----------|--|
| GOOD PROGNOSTIC SIGN | 0.3 - 0.6 |  |
| POOR PROGNOSTIC SIGN | 1.2 - 1.6 |  |



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**RATIO** 

mg/dL

3.60 - 7.70

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|---|--------------------|---------------|-------------------------------|
| KIDNE   | Y FUNCTION TE      | ST (COMPLETE) |                               |
| UREA: SERUM by urease - glutamate dehydrogenase (gldh)            | 54.13 <sup>H</sup> | mg/dL         | 10.00 - 50.00                 |
| CREATININE: SERUM by ENZYMATIC, SPECTROPHOTOMETERY                | 1.32               | mg/dL         | 0.40 - 1.40                   |
| BLOOD UREA NITROGEN (BUN): SERUM by CALCULATED, SPECTROPHOTOMETRY | 25.29 <sup>H</sup> | mg/dL         | 7.0 - 25.0                    |
| BLOOD UREA NITROGEN (BUN)/CREATININE                              | 19.16              | RATIO         | 10.0 - 20.0                   |

| by CALCULATED, SPECTROPHOTOMETRY |       |
|----------------------------------|-------|
| UREA/CREATININE RATIO: SERUM     | 41.01 |
| by CALCULATED, SPECTROPHOTOMETRY |       |
| URIC ACID: SERUM                 | 6.01  |

by URICASE - OXIDASE PEROXIDASE

CALCIUM: SERUM
by ARSENAZO III, SPECTROPHOTOMETRY

9.19 mg/dL 8.50 - 10.60

PHOSPHOROUS: SERUM 3.96 mg/dL 2.30 - 4.70 by PHOSPHOMOLYBDATE, SPECTROPHOTOMETRY

by PHOSPHOMOLYBDATE, SPECTROPHOTOMETRY **ELECTROLYTES** 

by ISE (ION SELECTIVE ELECTRODE)

 SODIUM: SERUM
 134.7<sup>L</sup>
 mmol/L
 135.0 - 150.0

 by ISE (ION SELECTIVE ELECTRODE)
 6.51<sup>H</sup>
 mmol/L
 3.50 - 5.00

 by ISE (ION SELECTIVE ELECTRODE)
 101.03
 mmol/L
 90.0 - 110.0

ESTIMATED GLOMERULAR FILTERATION RATE

ESTIMATED GLOMERULAR FILTERATION RATE 54.5

(eGFR): SERUM by CALCULATED

RATIO: SERUM

KINDLY CORRELATE CLINICALLY

**INTERPRETATION:** 

ADVICE

To differentiate between pre- and post renal azotemia.

INCREASED RATIO (>20:1) WITH NORMAL CREATININE:

1. Prerenal azotemia (BUN rises without increase in creatinine) e.g. heart failure, salt depletion, dehydration, blood loss) due to decreased glomerular filtration rate.



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(A Unit of KOS Healthcare)



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Dr. Yugam Chopra MD (Pathology) CEO & Consultant Pathologist

**NAME** : Mr. SURINDER KUMAR

AGE/ GENDER : 80 YRS/MALE **PATIENT ID** :1709125

**COLLECTED BY** : SURJESH REG. NO./LAB NO. :012412260018

REFERRED BY **REGISTRATION DATE** : 26/Dec/2024 10:44 AM BARCODE NO. :01523025 **COLLECTION DATE** : 26/Dec/2024 11:07AM CLIENT CODE. : KOS DIAGNOSTIC LAB REPORTING DATE : 26/Dec/2024 02:48PM

**CLIENT ADDRESS** : 6349/1, NICHOLSON ROAD, AMBALA CANTT

**Test Name** Value Unit **Biological Reference interval** 

- 2. Catabolic states with increased tissue breakdown.
- 3. GI haemorrhage.
- 4. High protein intake.
- 5. Impaired renal function plus
- 6. Excess protein intake or production or tissue breakdown (e.g. infection, GI bleeding, thyrotoxicosis, Cushing's syndrome, high protein diet, burns, surgery, cachexia, high fever).
- 7. Urine reabsorption (e.g. ureter colostomy)
- 8. Reduced muscle mass (subnormal creatinine production)
- 9. Certain drugs (e.g. tetracycline, glucocorticoids)

#### INCREASED RATIO (>20:1) WITH ELEVATED CREATININE LEVELS:

- 1. Postrenal azotemia (BUN rises disproportionately more than creatinine) (e.g. obstructive uropathy).
- 2. Prerenal azotemia superimposed on renal disease.

#### DECREASED RATIO (<10:1) WITH DECREASED BUN:

- Acute tubular necrosis.
- 2. Low protein diet and starvation.
- 3. Severe liver disease.
- 4. Other causes of decreased urea synthesis.
- 5. Repeated dialysis (urea rather than creatinine diffuses out of extracellular fluid).
- 6. Inherited hyperammonemias (urea is virtually absent in blood).
- 7. SIADH (syndrome of inappropiate antidiuretic harmone) due to tubular secretion of urea.
- 8. Pregnancy.

### DECREASED RATIO (<10:1) WITH INCREASED CREATININE:

- 1. Phenacimide therapy (accelerates conversion of creatine to creatinine).
- 2. Rhabdomyolysis (releases muscle creatinine).
- 3. Muscular patients who develop renal failure.

#### **INAPPROPIATE RATIO:**

1. Diabetic ketoacidosis (acetoacetate causes false increase in creatinine with certain methodologies, resulting in normal ratio when dehydration should produce an increased BUN/creatinine ratio).

2. Cephalosporin therapy (interferes with creatinine measurement) ESTIMATED GLOMERULAR FILTERATION RATE:

| CKD STAGE | DESCRIPTION                           | GFR ( mL/min/1.73m2 ) | ASSOCIATED FINDINGS                               |
|-----------|---------------------------------------|-----------------------|---|
| G1        | Normal kidney function                | >90                   | No proteinuria                                    |
| G2        | Kidney damage with normal or high GFR | >90                   | Presence of Protein ,<br>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                   |   |



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**Test Name** Value Unit **Biological Reference interval** 

#### 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 creating between 45-59 ml/min/1.73 m2 (G3) and without any marker of Kidney damage, It is recommended to measure

4. eGFR category G1 OR G2 does not fullfill 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).

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



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 : 26/Dec/2024 10:44 AM

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 CLIENT CODE.
 : KOS DIAGNOSTIC LAB
 REPORTING DATE
 : 26/Dec/2024 12:44PM

CLIENT ADDRESS : 6349/1, NICHOLSON ROAD, AMBALA CANTT

Test Name Value Unit Biological Reference interval

# CLINICAL PATHOLOGY URINE ROUTINE & MICROSCOPIC EXAMINATION

#### **PHYSICAL EXAMINATION**

QUANTITY RECIEVED 10 ml

COLOUR AMBER YELLOW PALE YELLOW

by DIP STICK/REFLECTANCE SPECTROPHOTOMETRY

TRANSPARANCY HAZY CLEAR by DIP STICK/REFLECTANCE SPECTROPHOTOMETRY

SPECIFIC GRAVITY <=1.005 1.002 - 1.030

by DIP STICK/REFLECTANCE SPECTROPHOTOMETRY

**CHEMICAL EXAMINATION** 

REACTION ACIDIC

by DIP STICK/REFLECTANCE SPECTROPHOTOMETRY
PROTEIN Negative NEGATIVE (-ve)

by DIP STICK/REFLECTANCE SPECTROPHOTOMETRY

SUGAR 2+ NEGATIVE (-ve)

by DIP STICK/REFLECTANCE SPECTROPHOTOMETRY

pH <=5.0 5.0 - 7.5

by DIP STICK/REFLECTANCE SPECTROPHOTOMETRY

BILIRUBIN Negative NEGATIVE (-ve)

by DIP STICK/REFLECTANCE SPECTROPHOTOMETRY

NITRITE Negative NEGATIVE (-ve) by DIP STICK/REFLECTANCE SPECTROPHOTOMETRY.

UROBILINOGEN Normal EU/dL 0.2 - 1.0

KETONE BODIES Negative NEGATIVE (-ve)

by DIP STICK/REFLECTANCE SPECTROPHOTOMETRY

BLOOD Negative NEGATIVE (-ve)

by DIP STICK/REFLECTANCE SPECTROPHOTOMETRY

ASCORBIC ACID

by DIP STICK/REFLECTANCE SPECTROPHOTOMETRY

NEGATIVE (-ve)

NEGATIVE (-ve)

**MICROSCOPIC EXAMINATION** 

by DIP STICK/REFLECTANCE SPECTROPHOTOMETRY

RED BLOOD CELLS (RBCs) NEGATIVE (-ve) /HPF 0 - 3 by MICROSCOPY ON CENTRIFUGED URINARY SEDIMENT

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| Test Name  | Value          | Unit | Biological Reference interval |
|--|----------------|------|-------------------------------|
| PUS CELLS by MICROSCOPY ON CENTRIFUGED URINARY SEDIMENT                        | 2-4            | /HPF | 0 - 5                         |
| EPITHELIAL CELLS by MICROSCOPY ON CENTRIFUGED URINARY SEDIMENT                 | 1-3            | /HPF | ABSENT                        |
| CRYSTALS by MICROSCOPY ON CENTRIFUGED URINARY SEDIMENT                         | NEGATIVE (-ve) |      | NEGATIVE (-ve)                |
| CASTS by MICROSCOPY ON CENTRIFUGED URINARY SEDIMENT                            | NEGATIVE (-ve) |      | NEGATIVE (-ve)                |
| BACTERIA by MICROSCOPY ON CENTRIFUGED URINARY SEDIMENT                         | NEGATIVE (-ve) |      | NEGATIVE (-ve)                |
| OTHERS by MICROSCOPY ON CENTRIFUGED URINARY SEDIMENT                           | NEGATIVE (-ve) |      | NEGATIVE (-ve)                |
| TRICHOMONAS VAGINALIS (PROTOZOA) by MICROSCOPY ON CENTRIFUGED URINARY SEDIMENT | ABSENT         |      | ABSENT                        |
| RECHECKED MANUALLY . Correlate clinically.                                     |                |      |                               |



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**CLIENT ADDRESS** : 6349/1, NICHOLSON ROAD, AMBALA CANTT

**Value** Unit **Biological Reference interval Test Name** 

### **MICROBIOLOGY**

### CULTURE AEROBIC BACTERIA AND ANTIBIOTIC SENSITIVITY: URINE

#### **CULTURE AND SUSCEPTIBILITY: URINE**

DATE OF SAMPLE 26-12-2024 SPECIMEN SOURCE URINE INCUBATION PERIOD 48 HOURS by AUTOMATED BROTH CULTURE

**CULTURE** 

by AUTOMATED BROTH CULTURE

NO AEROBIC PYOGENIC ORGANISM GROWN AFTER 48 HOURS OF **ORGANISM** by AUTOMATED BROTH CULTURE

**STERILE** 

**INCUBATION AT 37\*C** 

### **AEROBIC SUSCEPTIBILITY: URINE**

#### INTERPRETATION:

1. In urine culture and sensitivity, presence of more than 100,000 organism per mL in midstream sample of urine is considered clinically significant. However in symptomatic patients, a smaller number of bacteria (100 to 10000/mL) may signify infection.

2. Colony count of 100 to 10000/ mL indicate infection, if isolate from specimen obtained by suprapubic aspiration or "in-and-out"

catheterization or from patients with indwelling catheters. **SUSCEPTIBILITY:** 

1. A test interpreted as SENSTITIVE implies that infection due to isolate may be appropriately treated with the dosage of an antimicrobial agent

recommended for that type of infection and infecting species, unless otherwise indicated..

2. A test interpreted as **INTERMEDIATE** implies that the" Infection due to the isolate may be appropriately treated in body sites where the drugs are

physiologically concentrated or when a high dosage of drug can be used".

3.A test interpreted as **RESISTANT** implies that the "isolates are not inhibited by the usually achievable concentration of the agents with normal dosage, schedule and/or fall in the range where specific microbial resistance mechanism are likely (e.g. beta-lactamases), and clinical efficacy has not been reliable in treatment studies.

### **CAUTION:**

Conditions which can cause a false Negative culture:

- 1. Patient is on antibiotics. Please repeat culture post therapy.
- 2. Anaerobic bacterial infection.
- 3. Fastidious aerobic bacteria which are not able to grow on routine culture media.
- 4. Besides all these factors, at least in 25-40 % of cases there is no direct correlation between in vivo clinical picture.
- 5. Renal tuberculosis to be confirmed by AFB studies.

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



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