ISO 9001 : 2008 CERTIFIED LAB

KOS Diagnostic Lab
(A Unit of KOS Healthcare)

KOS™
EXCELLENCE IN HEALTHCARE & DIAGNOSTICS

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

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

NAME	**: Mrs. SHAKUNTLA**		
AGE/ GENDER	: 78 YRS/FEMALE	**PATIENT ID**	: 1647707
COLLECTED BY	:	**REG. NO./LAB NO.**	**: 012410190041**
REFERRED BY	:	**REGISTRATION DATE**	: 19/Oct/2024 11:50 AM
BARCODE NO.	: 01519186	**COLLECTION DATE**	: 19/Oct/2024 11:57AM
CLIENT CODE.	: KOS DIAGNOSTIC LAB	**REPORTING DATE**	: 19/Oct/2024 01:13PM
CLIENT ADDRESS	: 6349/1, NICHOLSON ROAD, AMBALA CANTT		

Test Name	Value	Unit	Biological Reference interval

ENDOCRINOLOGY

THYROID FUNCTION TEST: TOTAL

TRIIODOTHYRONINE (T3): SERUM *by CMIA (CHEMILUMINESCENT MICROPARTICLE IMMUNOASSAY)*	0.869	ng/mL	0.35 - 1.93
THYROXINE (T4): SERUM *by CMIA (CHEMILUMINESCENT MICROPARTICLE IMMUNOASSAY)*	6.44	µgm/dL	4.87 - 12.60
THYROID STIMULATING HORMONE (TSH): SERUM *by CMIA (CHEMILUMINESCENT MICROPARTICLE IMMUNOASSAY)*	3.245	µIU/mL	0.35 - 5.50

3rd GENERATION, ULTRASENSITIVE

INTERPRETATION:

TSH levels are subject to circadian variation, reaching peak levels between 2-4 a.m and at a minimum between 6-10 pm. The variation is of the order of 50%.Hence time of the day has influence on the measured serum TSH concentrations. TSH stimulates the production and secretion of the metabolically active hormones, thyroxine (T4)and triiodothyronine (T3).Failure at any level of regulation of the hypothalamic-pituitary-thyroid axis will result in either underproduction (hypothyroidism) or overproduction(hyperthyroidism) of T4 and/or T3.

CLINICAL CONDITION	T3	T4	TSH
Primary Hypothyroidism:	Reduced	Reduced	Increased (Significantly)
Subclinical Hypothyroidism:	Normal or Low Normal	Normal or Low Normal	High
Primary Hyperthyroidism:	Increased	Increased	Reduced (at times undetectable)
Subclinical Hyperthyroidism:	Normal or High Normal	Normal or High Normal	Reduced

LIMITATIONS:-

1. T3 and T4 circulates in reversibly bound form with Thyroid binding globulins (TBG),and to a lesser extent albumin and Thyroid binding Pre Albumin so conditions in which TBG and protein levels alter such as pregnancy, excess estrogens, androgens, anabolic steroids and glucocorticoids may falsely affect the T3 and T4 levels and may cause false thyroid values for thyroid function tests.
2. Normal levels of T4 can also be seen in Hyperthyroid patients with :T3 Thyrotoxicosis, Decreased binding capacity due to hypoproteinemia or ingestion of certain drugs (e.g.: phenytoin , salicylates).
3. Serum T4 levels in neonates and infants are higher than values in the normal adult , due to the increased concentration of TBG in neonate serum.
4. TSH may be normal in central hypothyroidism , recent rapid correction of hyperthyroidism or hypothyroidism , pregnancy , phenytoin therapy.

TRIIODOTHYRONINE (T3)		THYROXINE (T4)		THYROID STIMULATING HORMONE (TSH)	
Age	**Refferance Range (ng/mL)**	**Age**	**Refferance Range (µg/dL)**	**Age**	**Reference Range (µIU/mL)**
0 - 7 Days	**0.20 - 2.65**	**0 - 7 Days**	**5.90 – 18.58**	**0 - 7 Days**	**2.43 - 24.3**
7 Days - 3 Months	**0.36 - 2.59**	**7 Days - 3 Months**	**6.39 - 17.66**	**7 Days - 3 Months**	**0.58 - 11.00**
3 - 6 Months	**0.51 - 2.52**	**3 - 6 Months**	**6.75 – 17.04**	**3 Days – 6 Months**	**0.70 - 8.40**

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

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

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

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

NAME	**: Mrs. SHAKUNTLA**		
AGE/ GENDER	: 78 YRS/FEMALE	**PATIENT ID**	: 1647707
COLLECTED BY	:	**REG. NO./LAB NO.**	**: 012410190041**
REFERRED BY	:	**REGISTRATION DATE**	: 19/Oct/2024 11:50 AM
BARCODE NO.	: 01519186	**COLLECTION DATE**	: 19/Oct/2024 11:57AM
CLIENT CODE.	: KOS DIAGNOSTIC LAB	**REPORTING DATE**	: 19/Oct/2024 01:13PM
CLIENT ADDRESS	: 6349/1, NICHOLSON ROAD, AMBALA CANTT		

Test Name			Value	Unit	Biological Reference interval
6 - 12 Months	0.74 - 2.40	6 - 12 Months	7.10 – 16.16	6 – 12 Months	0.70 - 7.00
1 - 10 Years	0.92 - 2.28	1 - 10 Years	6.00 - 13.80	1 – 10 Years	0.60 - 5.50
11- 19 Years	0.35 - 1.93	11 - 19 Years	4.87- 13.20	11 – 19 Years	0.50 – 5.50
> 20 years (Adults)	0.35 - 1.93	> 20 Years (Adults)	4.87 - 12.60	> 20 Years (Adults)	0.35– 5.50
RECOMMENDATIONS OF TSH LEVELS DURING PREGNANCY (µIU/mL)					
1st Trimester			0.10 – 2.50		
2nd Trimester			0.20 – 3.00		
3rd Trimester			0.30 – 4.10		

INCREASED TSH LEVELS:

1.Primary or untreated hypothyroidism may vary from 3 times to more than 100 times normal depending upon degree of hypofunction.
2.Hypothyroid patients receiving insufficient thyroid replacement therapy.
3.Hashimotos thyroiditis
4.DRUGS: Amphetamines, iodine containing agents & dopamine antagonist.
5.Neonatal period, increase in 1st 2-3 days of life due to post-natal surge

DECREASED TSH LEVELS:

1.Toxic multi-nodular goiter & Thyroiditis.
2.Over replacement of thyroid hormone in treatment of hypothyroidism.
3.Autonomously functioning Thyroid adenoma
4.Secondary pituitary or hypothalamic hypothyroidism
5.Acute psychiatric illness
6.Severe dehydration.
7.DRUGS: Glucocorticoids, Dopamine, Levodopa, T4 replacement therapy, Anti-thyroid drugs for thyrotoxicosis.
8.Pregnancy: 1st and 2nd Trimester

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

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

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

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

NAME	**: Mrs. SHAKUNTLA**		
AGE/ GENDER	: 78 YRS/FEMALE	**PATIENT ID**	: 1647707
COLLECTED BY	:	**REG. NO./LAB NO.**	**: 012410190041**
REFERRED BY	:	**REGISTRATION DATE**	: 19/Oct/2024 11:50 AM
BARCODE NO.	: 01519186	**COLLECTION DATE**	: 19/Oct/2024 11:57AM
CLIENT CODE.	: KOS DIAGNOSTIC LAB	**REPORTING DATE**	: 19/Oct/2024 12:32PM
CLIENT ADDRESS	: 6349/1, NICHOLSON ROAD, AMBALA CANTT		

CLINICAL PATHOLOGY

URINE ROUTINE & MICROSCOPIC EXAMINATION

Test Name	Value	Unit	Biological Reference interval
PHYSICAL EXAMINATION			
QUANTITY RECIEVED *by DIP STICK/REFLECTANCE SPECTROPHOTOMETRY*	10	ml	
COLOUR *by DIP STICK/REFLECTANCE SPECTROPHOTOMETRY*	AMBER YELLOW		PALE YELLOW
TRANSPARANCY *by DIP STICK/REFLECTANCE SPECTROPHOTOMETRY*	TURBID		CLEAR
SPECIFIC GRAVITY *by DIP STICK/REFLECTANCE SPECTROPHOTOMETRY*	1.01		1.002 - 1.030
CHEMICAL EXAMINATION			
REACTION *by DIP STICK/REFLECTANCE SPECTROPHOTOMETRY*	ACIDIC		
PROTEIN ***by DIP STICK/REFLECTANCE SPECTROPHOTOMETRY***	**1+**		**NEGATIVE (-ve)**
SUGAR *by DIP STICK/REFLECTANCE SPECTROPHOTOMETRY*	Negative		NEGATIVE (-ve)
pH *by DIP STICK/REFLECTANCE SPECTROPHOTOMETRY*	<=5.0		5.0 - 7.5
BILIRUBIN *by DIP STICK/REFLECTANCE SPECTROPHOTOMETRY*	Negative		NEGATIVE (-ve)
NITRITE *by DIP STICK/REFLECTANCE SPECTROPHOTOMETRY.*	Positive		NEGATIVE (-ve)
UROBILINOGEN *by DIP STICK/REFLECTANCE SPECTROPHOTOMETRY*	Normal	EU/dL	0.2 - 1.0
KETONE BODIES *by DIP STICK/REFLECTANCE SPECTROPHOTOMETRY*	Negative		NEGATIVE (-ve)
BLOOD *by DIP STICK/REFLECTANCE SPECTROPHOTOMETRY*	TRACE		NEGATIVE (-ve)
ASCORBIC ACID *by DIP STICK/REFLECTANCE SPECTROPHOTOMETRY*	NEGATIVE (-ve)		NEGATIVE (-ve)
MICROSCOPIC EXAMINATION			

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

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

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

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

NAME	**: Mrs. SHAKUNTLA**		
AGE/ GENDER	: 78 YRS/FEMALE	**PATIENT ID**	: 1647707
COLLECTED BY	:	**REG. NO./LAB NO.**	**: 012410190041**
REFERRED BY	:	**REGISTRATION DATE**	: 19/Oct/2024 11:50 AM
BARCODE NO.	: 01519186	**COLLECTION DATE**	: 19/Oct/2024 11:57AM
CLIENT CODE.	: KOS DIAGNOSTIC LAB	**REPORTING DATE**	: 19/Oct/2024 12:32PM
CLIENT ADDRESS	: 6349/1, NICHOLSON ROAD, AMBALA CANTT		

Test Name	Value	Unit	Biological Reference interval
RED BLOOD CELLS (RBCs) *by MICROSCOPY ON CENTRIFUGED URINARY SEDIMENT*	1-3	/HPF	0 - 3
PUS CELLS *by MICROSCOPY ON CENTRIFUGED URINARY SEDIMENT*	FULL FEILD	/HPF	0 - 5
EPITHELIAL CELLS *by MICROSCOPY ON CENTRIFUGED URINARY SEDIMENT*	3-4	/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

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

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

NAME	**: Mrs. SHAKUNTLA**		
AGE/ GENDER	: 78 YRS/FEMALE	**PATIENT ID**	: 1647707
COLLECTED BY	:	**REG. NO./LAB NO.**	**: 012410190041**
REFERRED BY	:	**REGISTRATION DATE**	: 19/Oct/2024 12:38 PM
BARCODE NO.	: 01519186	**COLLECTION DATE**	: 19/Oct/2024 05:09PM
CLIENT CODE.	: KOS DIAGNOSTIC LAB	**REPORTING DATE**	: 21/Oct/2024 12:23PM
CLIENT ADDRESS	: 6349/1, NICHOLSON ROAD, AMBALA CANTT		

Test Name	Value	Unit	Biological Reference interval

MICROBIOLOGY

CULTURE AEROBIC BACTERIA AND ANTIBIOTIC SENSITIVITY: URINE

CULTURE AND SUSCEPTIBILITY: URINE

DATE OF SAMPLE	19-10-2024
SPECIMEN SOURCE	URINE
INCUBATION PERIOD *by AUTOMATED BROTH CULTURE*	48 HOURS
GRAM STAIN ***by MICROSCOPY***	**GRAM NEGATIVE (-ve)**
CULTURE ***by AUTOMATED BROTH CULTURE***	**POSITIVE (+ve)**
ORGANISM *by AUTOMATED BROTH CULTURE*	ESCHERICHIA COLI (E.COLI)

AEROBIC SUSCEPTIBILITY: URINE

AMOXICILLIN+CLAVULANIC ACID ***by AUTOMATED BROTH MICRODILUTION, CLSI*** Concentration: 8/4 µg/mL	**SENSITIVE**
AMPICILLIN ***by AUTOMATED BROTH MICRODILUTION, CLSI*** Concentration: 8 µg/mL	**SENSITIVE**
AMPICILLIN+SULBACTUM ***by AUTOMATED BROTH MICRODILUTION, CLSI*** Concentration: 8/4 µg/mL	**SENSITIVE**
CHLORAMPHENICOL ***by AUTOMATED BROTH MICRODILUTION, CLSI*** Concentration: 8 µg/mL	**SENSITIVE**
CIPROFLOXACIN ***by AUTOMATED BROTH MICRODILUTION, CLSI*** Concentration: 1 µg/mL	**SENSITIVE**
DOXYCYCLINE	**SENSITIVE**

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

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

NAME	**: Mrs. SHAKUNTLA**		
AGE/ GENDER	: 78 YRS/FEMALE	**PATIENT ID**	: 1647707
COLLECTED BY	:	**REG. NO./LAB NO.**	**: 012410190041**
REFERRED BY	:	**REGISTRATION DATE**	: 19/Oct/2024 12:38 PM
BARCODE NO.	: 01519186	**COLLECTION DATE**	: 19/Oct/2024 05:09PM
CLIENT CODE.	: KOS DIAGNOSTIC LAB	**REPORTING DATE**	: 21/Oct/2024 12:23PM
CLIENT ADDRESS	: 6349/1, NICHOLSON ROAD, AMBALA CANTT		

Test Name	Value	Unit	Biological Reference interval
by AUTOMATED BROTH MICRODILUTION, CLSI Concentration: 4 µg/mL			
NALIDIXIC ACID *by AUTOMATED BROTH MICRODILUTION, CLSI* Concentration: 16 µg/mL	RESISTANT		
GENTAMICIN *by AUTOMATED BROTH MICRODILUTION, CLSI* Concentration: 16 µg/mL	**SENSITIVE**		
NITROFURATOIN *by AUTOMATED BROTH MICRODILUTION, CLSI* Concentration: 16 µg/mL	**INTERMEDIATE**		
NORFLOXACIN *by AUTOMATED BROTH MICRODILUTION, CLSI* Concentration: 4 µg/mL	**SENSITIVE**		
MINOCYCLINE *by AUTOMATED BROTH MICRODILUTION, CLSI* Concentration: 4 µg/mL	**SENSITIVE**		
TOBRAMYCIN *by AUTOMATED BROTH MICRODILUTION, CLSI* Concentration: 4 µg/mL	**SENSITIVE**		
AMIKACIN *by AUTOMATED BROTH MICRODILUTION, CLSI* Concentration: 16 µg/mL	**SENSITIVE**		
AZETREONAM *by AUTOMATED BROTH MICRODILUTION, CLSI* Concentration: 4 µg/mL	**SENSITIVE**		
CEFAZOLIN *by AUTOMATED BROTH MICRODILUTION, CLSI* Concentration: 16 µg/mL	**SENSITIVE**		

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

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

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

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

NAME	**: Mrs. SHAKUNTLA**		
AGE/ GENDER	: 78 YRS/FEMALE	**PATIENT ID**	: 1647707
COLLECTED BY	:	**REG. NO./LAB NO.**	**: 012410190041**
REFERRED BY	:	**REGISTRATION DATE**	: 19/Oct/2024 12:38 PM
BARCODE NO.	: 01519186	**COLLECTION DATE**	: 19/Oct/2024 05:09PM
CLIENT CODE.	: KOS DIAGNOSTIC LAB	**REPORTING DATE**	: 21/Oct/2024 12:23PM
CLIENT ADDRESS	: 6349/1, NICHOLSON ROAD, AMBALA CANTT		

Test Name	Value	Unit	Biological Reference interval
CEFIXIME *by AUTOMATED BROTH MICRODILUTION, CLSI*	**INTERMEDIATE**		
CEFOXITIN *by AUTOMATED BROTH MICRODILUTION, CLSI* Concentration: 8 µg/mL	**SENSITIVE**		
CEFTAZIDIME *by AUTOMATED BROTH MICRODILUTION, CLSI* Concentration: 4 µg/mL	**SENSITIVE**		
CEFTRIAXONE *by AUTOMATED BROTH MICRODILUTION, CLSI*	**SENSITIVE**		
FOSFOMYCIN *by AUTOMATED BROTH MICRODILUTION, CLSI* Concentration: 64 µg/mL	**SENSITIVE**		
LEVOFLOXACIN *by AUTOMATED BROTH MICRODILUTION, CLSI* Concentration: 2 µg/mL	**SENSITIVE**		
NETLIMICIN SULPHATE *by AUTOMATED BROTH MICRODILUTION, CLSI* Concentration: 8 µg/mL	**SENSITIVE**		
PIPERACILLIN+TAZOBACTUM *by AUTOMATED BROTH MICRODILUTION, CLSI* Concentration: 16/4 µg/mL	**SENSITIVE**		
TICARCILLIN+CLAVULANIC ACID *by AUTOMATED BROTH MICRODILUTION, CLSI* Concentration: 16/2 µg/mL	**SENSITIVE**		
TRIMETHOPRIM+SULPHAMETHAZOLE *by AUTOMATED BROTH MICRODILUTION, CLSI* Concentration: 2/38 µg/mL	RESISTANT		
CEFIPIME *by AUTOMATED BROTH MICRODILUTION, CLSI*	**SENSITIVE**		

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

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

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

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

NAME	**: Mrs. SHAKUNTLA**		
AGE/ GENDER	: 78 YRS/FEMALE	**PATIENT ID**	: 1647707
COLLECTED BY	:	**REG. NO./LAB NO.**	**: 012410190041**
REFERRED BY	:	**REGISTRATION DATE**	: 19/Oct/2024 12:38 PM
BARCODE NO.	: 01519186	**COLLECTION DATE**	: 19/Oct/2024 05:09PM
CLIENT CODE.	: KOS DIAGNOSTIC LAB	**REPORTING DATE**	: 21/Oct/2024 12:23PM
CLIENT ADDRESS	: 6349/1, NICHOLSON ROAD, AMBALA CANTT		

Test Name	Value	Unit	Biological Reference interval

Concentration: 2 µg/mL

DORIPENEM **SENSITIVE**
by AUTOMATED BROTH MICRODILUTION, CLSI
Concentration: 1 µg/mL

IMIPINEM **SENSITIVE**
by AUTOMATED BROTH MICRODILUTION, CLSI
Concentration: 1 µg/mL

MEROPENEM **SENSITIVE**
by AUTOMATED BROTH MICRODILUTION, CLSI
Concentration: 1 µg/mL

COLISTIN **SENSITIVE**
by AUTOMATED BROTH MICRODILUTION, CLSI
Concentration: 0.06 µg/mL

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 ***

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

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