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<b>NAME</b>	: Mrs. DOLLY SONI	<b>PATIENT ID</b>	: 1579032
<b>AGE/ GENDER</b>	: 28 YRS/FEMALE	<b>REG. NO./LAB NO.</b>	: 012408130018
<b>COLLECTED BY</b>	:	<b>REGISTRATION DATE</b>	: 13/Aug/2024 09:34 AM
<b>REFERRED BY</b>	:	<b>COLLECTION DATE</b>	: 13/Aug/2024 09:37AM
<b>BARCODE NO.</b>	: 01514987	<b>REPORTING DATE</b>	: 13/Aug/2024 11:30AM
<b>CLIENT CODE.</b>	: KOS DIAGNOSTIC LAB		
<b>CLIENT ADDRESS</b>	: 6349/1, NICHOLSON ROAD, AMBALA CANTT		

Test Name	Value	Unit	Biological Reference interval
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## ENDOCRINOLOGY

### THYROID FUNCTION TEST: FREE

FREE TRIIODOTHYRONINE (FT3): SERUM <i>by CMIA (CHEMILUMINESCENT MICROPARTICLE IMMUNOASSAY)</i>	2.121	pg/mL	1.60 - 3.90
FREE THYROXINE (FT4): SERUM <i>by CMIA (CHEMILUMINESCENT MICROPARTICLE IMMUNOASSAY)</i>	0.872	ng/dL	0.70 - 1.50
THYROID STIMULATING HORMONE (TSH): SERUM <i>by CMIA (CHEMILUMINESCENT MICROPARTICLE IMMUNOASSAY)</i>	0.332 <sup>L</sup>	μIU/mL	0.35 - 5.50

3rd GENERATION, ULTRASENSITIVE

#### INTERPRETATION:

1. FT3 & FT4 are metabolic active form of thyroid hormones and correlate much better with clinical condition of the patient as compared to Total T4 levels. High FT3 & FT4 with normal TSH Levels and abnormal thyroid function (Total Thyroid) can occasionally be seen in cases of PERIPHERAL THYROID HORMONE RESISTANCE

2. TSH levels are subjected 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 concentration.

#### INCREASED TSH LEVELS:

1. Primary hypothyroidism is accompanied by depressed serum FT3 & FT4 values and elevated serum TSH levels. 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, idonie containing agents & dopamine antagonist.
5. Neonatal period, increase in 1st 2-3 days of life due to post-natal surge

#### DECREASED TSH LEVELS:

1. Primary hyperthyroidism is accompanied by elevated serum FT3 & FT4 values along with depressed TSH levels.
1. Toxic multi-nodular goitre & 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 Trimester

#### NOTE:

1. High FT3 levels accompanied by normal FT4 levels and depressed TSH levels may be seen T3 thyrotoxicosis, central hypothyroidism occurs due to pituitary or thalamic malfunction
2. Secondary & Tertiary hypothyroidism, this relatively rare but important condition is indicated by presence of low serum FT3 and FT4 levels, in conjugation with TSH levels that are paradoxically either low/normal or are not elevated to levels that are expected.



  
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<b>REFERRED BY</b>	:	<b>COLLECTION DATE</b>	: 13/Aug/2024 11:07AM
<b>BARCODE NO.</b>	: 01514987	<b>REPORTING DATE</b>	: 13/Aug/2024 05:24PM
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### IMMUNOPATHOLOGY/SEROLOGY

#### TYPHUS FEVER/SCRUB TYPHUS (RICKETTSIA) ANTIBODIES PANEL IgG AND IgM

SCRUB TYPHUS ANTIBODY IgG QUANTITATIVE <i>by ELISA (ENZYME LINKED IMMUNOASSAY)</i>	0.28	RATIO	<=1.00
SCRUB TYPHUS ANTIBODY IgG RESULT <i>by ELISA (ENZYME LINKED IMMUNOASSAY)</i>	NON - REACTIVE		NON - REACTIVE
SCRUB TYPHUS ANTIBODY IgM QUANTITATIVE <i>by ELISA (ENZYME LINKED IMMUNOASSAY)</i>	0.2	RATIO	<=1.0
SCRUB TYPHUS ANTIBODY IgM RESULT <i>by ELISA (ENZYME LINKED IMMUNOASSAY)</i>	NOT DETECTED		


#### INTERPRETATION:


1.The scrub Typhus Detect IgG and IgM antibodies for exposure to Orientia tsutsugamushi (OT; formerly Rickettsia) for the detection of IgG and IgM antibodies in human serum to OT derived recombinant antigen (1-10). This test is to aid in the diagnosis of human exposure to OT species.

2.Scrub Typhus is an infectious disease that is caused by Orientia tsutsugamushi (formerly Rickettsia), a tiny parasite about the size of bacteria that belongs to the family Rickettsiaceae. A bite from a trombiculid mite, a parasite of rodents, will transmit the disease. An ulcer of the skin is characteristic of a bite from a trombiculid mite, followed by symptoms including fever, a spotted rash on the torso, and swelling of the lymph glands. Scrub typhus generally occurs after exposure to areas with secondary (scrub) vegetation, which is where its name is derived from. However, the disease can also be prevalent in sandy, mountainous, and tropical areas.

3.Scrub Typhus is a world wide illness, but particular to South East Asia and the Western pacific. It accounts for approximately 20% of fever in some regions, in South East Asia, where it is endemic. Illness lasts for a period of 10 to 12 days after the initial bite. With therapy, the fever will break within 36 hours, but if left untreated, complications or death may occur.



  
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**DENGUE FEVER ANTIGEN NS1 - ELISA (QUANTITATIVE)**


DENGUE NS1 ANTIGEN QUANTITATIVE by ELISA (ENZYME LINKED IMMUNOSORBENT ASSAY)	0.367	INDEX	NEGATIVE: < 0.90 BORDERLINE: 0.90 - 1.10 POSITIVE: >=1.10
DENGUE NS1 ANTIGEN RESULT by ELISA (ENZYME LINKED IMMUNOSORBENT ASSAY)	NEGATIVE (-ve)		NEGATIVE (-ve)


**INTERPRETATION**

DENGUE ANTIGEN NS1		
VALUE	UNIT	RESULT
< 0.90	INDEX	NEGATIVE (-ve)
0.90 - 1.10	INDEX	BORDERLINE
>=1.10	INDEX	POSITIVE (+ve)

1. The test becomes positive within 0-9 days of exposure to the virus (positive results are obtained within 24 hours of exposure in the overwhelming majority of patients) and generally remains positive till 15 days after exposure. The Dengue NS-1 antigen test is extremely useful in the early diagnosis of the disease thus helping in proper follow up and monitoring of the patients.  
 2. The IgM antibodies on the other hand take a minimum of 5-10 days in primary infection and 4-5 days in secondary infections to test positive and hence are suitable for the diagnosis of dengue fever only when the fever is approximately one week old.



  
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### LEPTOSPIRA ANTIBODY IgM


LEPTOSPIRA ANTIBODY IgM  
 by ELISA (ENZYME LINKED IMMUNOASSAY)


WEAK POSITIVE (+ve) TR

#### INTERPRETATION:

1. Leptospirosis, a potentially deadly zoonosis, is caused by the spirochete leptospira.
2. An extensive range of symptoms is known: fever, headaches, vomiting, abdominal pain, diarrhea, rashes, jaundice or red eyes.
3. The course of the disease can become considerably dangerous if not treated at the earliest, kidney damage, meningitis, liver failure and respiratory problems have also been reported.
4. Thus early diagnosis of the disease is of utmost importance. leptospira IgG/IgM are qualitative test for the detection of genus specific human antibodies against leptospira in serum or plasma.
5. The IgM assay is recommended for the detection of acute leptospirosis, whereas the IgG test is a rational application in addition to the IgM test and completes the diagnostic results



  
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<b>BARCODE NO.</b>	: 01514987	<b>REPORTING DATE</b>	: 15/Aug/2024 01:43PM
<b>CLIENT CODE.</b>	: KOS DIAGNOSTIC LAB		
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## MICROBIOLOGY

### CULTURE AEROBIC BACTERIA AND ANTIBIOTIC SENSITIVITY: URINE

#### CULTURE AND SUSCEPTIBILITY: URINE

DATE OF SAMPLE	13-08-2024
SPECIMEN SOURCE	URINE
INCUBATION PERIOD	48 HOURS
by AUTOMATED BROTH CULTURE	
CULTURE	STERILE
by AUTOMATED BROTH CULTURE	
ORGANISM	NO AEROBIC PYOGENIC ORGANISM GROWN AFTER 48 HOURS OF INCUBATION AT 37°C
by AUTOMATED BROTH CULTURE	

#### 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 **SENSITIVE** 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.





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<b>BARCODE NO.</b>	: 01514987	<b>REPORTING DATE</b>	: 18/Aug/2024 12:01PM
<b>CLIENT CODE.</b>	: KOS DIAGNOSTIC LAB		
<b>CLIENT ADDRESS</b>	: 6349/1, NICHOLSON ROAD, AMBALA CANTT		

Test Name	Value	Unit	Biological Reference interval
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### CULTURE AEROBIC BACTERIA AND ANTIBIOTIC SENSITIVITY (CONVENTIONAL): BLOOD

#### BLOOD CULTURE AND SUSCEPTIBILITY

DATE OF SAMPLE	13-08-2024
SPECIMEN SOURCE	BLOOD
INCUBATION PERIOD	72 HOURS (3 SUBCULTURES)
CULTURE	STERILE
by AUTOMATED BROTH CULTURE	
ORGANISM	NO AEROBIC PYOGENIC ORGANISM GROWN AFTER 72 HOURS OF INCUBATION AT 37°C
by AUTOMATED BROTH CULTURE	

#### AEROBIC SUSCEPTIBILITY BLOOD

##### INTERPRETATION SUSCEPTIBILITY:

1. A test interpreted as **SENSITIVE** 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:

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





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