



	<b>Dr. Vinay Chopra</b> MD (Pathology & Micr Chairman & Consultan	obiology)	Dr. Yugam MD ( CEO & Consultant F	Pathology)
NAME	: Mr. PARDEEP BANSAL			
AGE/ GENDER	: 62 YRS/MALE	F	PATIENT ID	: 1672557
COLLECTED BY	:	F	REG. NO./LAB NO.	: 012411150001
REFERRED BY	:		REGISTRATION DATE	: 15/Nov/2024 06:44 AM
BARCODE NO.	: 01520817		COLLECTION DATE	: 15/Nov/2024 07:00AM : 15/Nov/2024 08:59AM
CLIENT CODE. CLIENT ADDRESS	: KOS DIAGNOSTIC LAB : 6349/1, NICHOLSON ROAD, AMB/		REPORTING DATE	: 15/N0V/2024 08:59AM
Test Name		Value	Unit	<b>Biological Reference interval</b>
	СОМР		LNESS PANEL: 1.4 OD COUNT (CBC)	
<b>RED BLOOD CELLS</b> HAEMOGLOBIN (H	S (RBCS) COUNT AND INDICES	4.4 ml	gm/dL	12.0 - 17.0
by CALORIMETRIC		11.7 <sup>L</sup>	Ű	
RED BLOOD CELL (	RBC) COUNT	6.29 <sup>H</sup>	Millions/o	cmm 3.50 - 5.00
PACKED CELL VOLU	UME (PCV)	<b>39.4<sup>L</sup></b>	%	40.0 - 54.0
,	utomated hematology analyzer AR VOLUME (MCV)	62.6 <sup>L</sup>	fL	80.0 - 100.0
	UTOMATED HEMATOLOGY ANALYZER AR HAEMOGLOBIN (MCH)		24	27.0 - 34.0
	UTOMATED HEMATOLOGY ANALYZER	18.6 <sup>L</sup>	pg	27:0 - 34.0
	AR HEMOGLOBIN CONC. (MCHC) UTOMATED HEMATOLOGY ANALYZER	29.7 <sup>L</sup>	g/dL	32.0 - 36.0
RED CELL DISTRIB	UTION WIDTH (RDW-CV)	17 <sup>H</sup>	%	11.00 - 16.00
	UTOMATED HEMATOLOGY ANALYZER UTION WIDTH (RDW-SD)	40	fL	35.0 - 56.0
by CALCULATED BY A MENTZERS INDEX	UTOMATED HEMATOLOGY ANALYZER	0.05	RATIO	BETA THALASSEMIA TRAIT: <
by CALCULATED		9.95	KATIO	13.0
				IRON DEFICIENCY ANEMIA: >13.0
GREEN & KING INI	DEX	16.92	RATIO	BETA THALASSEMIA TRAIT:<=
by CALCULATED				65.0 IDON DEFICIENCY ANEMIA
				IRON DEFICIENCY ANEMIA: > 65.0
WHITE BLOOD CE	LLS (WBCS)			
FOTAL LEUCOCYTE	E COUNT (TLC) ( by sf cube & microscopy	8010	/cmm	4000 - 11000
NUCLEATED RED E	BLOOD CELLS (nRBCS)	NIL		0.00 - 20.00
	RT HEMATOLOGY ANALYZER	NIT	%	< 10 %
NUCLEATED RED E	PROOD CELLS (UKBC2) %	NIL	/()	< 10 %

KOS Diagnostic Lab (A Unit of KOS Healthcare)





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



Page 1 of 18



NAME



Dr. Yugam Chopra

MD (Pathology) MD (Pathology & Microbiology) Chairman & Consultant Pathologist **CEO & Consultant Pathologist** : Mr. PARDEEP BANSAL **AGE/ GENDER** : 62 YRS/MALE **PATIENT ID** :1672557 **COLLECTED BY** REG. NO./LAB NO. :012411150001 : **REFERRED BY REGISTRATION DATE** :15/Nov/2024 06:44 AM : **BARCODE NO.** :01520817 **COLLECTION DATE** :15/Nov/2024 07:00AM CLIENT CODE. : KOS DIAGNOSTIC LAB **REPORTING DATE** :15/Nov/2024 08:59AM **CLIENT ADDRESS** : 6349/1, NICHOLSON ROAD, AMBALA CANTT Test Name Value Unit **Biological Reference interval DIFFERENTIAL LEUCOCYTE COUNT (DLC)** 50 - 70 **NEUTROPHILS** 60 % by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY 28 20 - 40 LYMPHOCYTES % by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY EOSINOPHILS 4 % 1 - 6 by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY MONOCYTES 8 % 2 - 12by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY BASOPHILS 0 % 0 - 1 by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY DCOLUTE LEUROCVTEC (WDC) COUNT

Dr. Vinay Chopra

ABSOLUTE LEUKOCYTES (WBC) COUNT			
ABSOLUTE NEUTROPHIL COUNT by flow cytometry by sf cube & microscopy	4806	/cmm	2000 - 7500
ABSOLUTE LYMPHOCYTE COUNT by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY	2243	/cmm	800 - 4900
ABSOLUTE EOSINOPHIL COUNT by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY	320	/cmm	40 - 440
ABSOLUTE MONOCYTE COUNT by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY	641	/cmm	80 - 880
ABSOLUTE BASOPHIL COUNT by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY	0	/cmm	0 - 110
PLATELETS AND OTHER PLATELET PREDICTIVE M	IARKERS.		
PLATELET COUNT (PLT) by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE	226000	/cmm	150000 - 450000
PLATELETCRIT (PCT) by hydro dynamic focusing, electrical impedence	0.27	%	0.10 - 0.36
MEAN PLATELET VOLUME (MPV) by hydro dynamic focusing, electrical impedence	12	fL	6.50 - 12.0
PLATELET LARGE CELL COUNT (P-LCC) by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE	98000 <sup>H</sup>	/cmm	30000 - 90000
PLATELET LARGE CELL RATIO (P-LCR) by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE	43.3	%	11.0 - 45.0
PLATELET DISTRIBUTION WIDTH (PDW) by hydro dynamic focusing, electrical impedence	16	%	15.0 - 17.0
NOTE: TEST CONDUCTED ON EDTA WHOLE PLOOD			

NOTE: TEST CONDUCTED ON EDTA WHOLE BLOOD



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







	<b>Dr. Vinay Chopra</b> MD (Pathology & Microbiology) Chairman & Consultant Patholog		(Pathology)
NAME	: Mr. PARDEEP BANSAL		
AGE/ GENDER	: 62 YRS/MALE	PATIENT ID	: 1672557
<b>COLLECTED BY</b>	:	REG. NO./LAB NO.	: 012411150001
<b>REFERRED BY</b>	:	<b>REGISTRATION DATE</b>	: 15/Nov/2024 06:44 AM
BARCODE NO.	: 01520817	<b>COLLECTION DATE</b>	: 15/Nov/2024 07:00AM
CLIENT CODE.	: KOS DIAGNOSTIC LAB	<b>REPORTING DATE</b>	: 15/Nov/2024 08:59AM
CLIENT ADDRESS	: 6349/1, NICHOLSON ROAD, AMBALA CANT	Т	
Test Name	Value	Unit	Biological Reference interval





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

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







	Dr. Vinay Ch MD (Pathology & Chairman & Con		Dr. Yugam MD CEO & Consultant	(Pathology)
NAME	: Mr. PARDEEP BANSAL			
AGE/ GENDER	: 62 YRS/MALE	PATI	ENT ID	: 1672557
COLLECTED BY	:	REG. 1	NO./LAB NO.	: 012411150001
REFERRED BY		REGIS	STRATION DATE	: 15/Nov/2024 06:44 AM
BARCODE NO.	: 01520817		ECTION DATE	: 15/Nov/2024 07:00AM
CLIENT CODE.	: KOS DIAGNOSTIC LAB		RTING DATE	: 15/Nov/2024 03:04PM
			KIING DATE	. 13/N0V/2024 03.04PM
CLIENT ADDRESS	: 6349/1, NICHOLSON ROAD,	AMBALA CANTT		
Test Name		Value	Unit	Biological Reference interva
WHOLE BLOOD	EMOGLOBIN (HbA1c):	8.8 <sup>H</sup>	%	4.0 - 6.4
ESTIMATED AVERA	RMANCE LIQUID CHROMATOGRAPHY) GE PLASMA GLUCOSE RMANCE LIQUID CHROMATOGRAPHY)	205.86 <sup>H</sup>	mg/dL	60.00 - 140.00
INTERPRETATION:				
	AS PER AMERICAN	DIABETES ASSOCIATION	(ADA):	
	REFERENCE GROUP	GLYCOSY	LATED HEMOGLOGIB	(HBAIC) in %
Non di	abetic Adults >= 18 years		<5.7	
	t Risk (Prediabetes)		5.7 – 6.4	
A				
A	iagnosing Diabetes		>= 6.5	
A		Coals of The	Age > 19 Years	< 7.0
A D	iagnosing Diabetes	Goals of The	Age > 19 Years rapy:	< 7.0
A D		Goals of The Actions Sugge	Age > 19 Years rapy:	< 7.0 >8.0

**KOS Diagnostic Lab** 

(A Unit of KOS Healthcare)

TEST PERFORMED AT KOS DIAGNOSTIC LAB. AMBALA CANTT

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 HbAlc. 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 faisely 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.



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

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





TEST PERFORMED AT KOS DIAGNOSTIC LAB, AMBALA CANTT.



r. Yugam Chopra MD (Pathology) Consultant Pathologist
: 1672557
NO. : 012411150001
N DATE : 15/Nov/2024 06:44 AM
ATE : 15/Nov/2024 07:00AM
ATE : 15/Nov/2024 09:21AM
Unit Biological Reference interval
e ESR is typically used in conjunction with other test such th of the above diseases as well as some others, such as nod cells, such as a high red blood cell count otein abnormalities. Some changes in red cell shape (suc ation or as it resolves. <b>Jammation.</b> inogen. orary elevations. e, theophylline, and vitamin A can increase ESR, while





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

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







	М		k Microbiology) sultant Pathologist	Dr. Yugan MD CEO & Consultant	(Pathology)
NAME	: Mr. PARDEEP	BANSAL			
AGE/ GENDER	: 62 YRS/MALE		P	ATIENT ID	: 1672557
COLLECTED BY	:		R	EG. NO./LAB NO.	: 012411150001
REFERRED BY	:		R	EGISTRATION DATE	: 15/Nov/2024 06:44 AM
BARCODE NO.	:01520817		C	OLLECTION DATE	: 15/Nov/2024 07:00AM
CLIENT CODE.	: KOS DIAGNOS	TIC LAB	R	EPORTING DATE	: 15/Nov/2024 11:31AM
CLIENT ADDRESS	: 6349/1, NICH	OLSON ROAD,	AMBALA CANTT		
Test Name			Value	Unit	Biological Reference interval
		CLINIC	CAL CHEMIST	RY/BIOCHEMIST	'RY
			<b>GLUCOSE F</b>	ASTING (F)	
GLUCOSE FASTING		DD-POD)	131.51 <sup>H</sup>	mg/dL	NORMAL: < 100.0 PREDIABETIC: 100.0 - 125.0

**IN ACCRDANCE 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.



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

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

KOS Central Lab: 6349/1, Nicholson Road, Ambala Cantt -133 001, Haryana KOS Molecular Lab: IInd Floor, Parry Hotel, Staff Road, Opp. GPO, Ambala Cantt -133 001, Haryana 0171-2643898, +91 99910 43898 | care@koshealthcare.com | www.koshealthcare.com



Page 6 of 18





		hopra & Microbiology) onsultant Pathologist		(Pathology)
NAME	: Mr. PARDEEP BANSAL			
AGE/ GENDER	: 62 YRS/MALE		PATIENT ID	: 1672557
COLLECTED BY	:		REG. NO./LAB NO.	: 012411150001
REFERRED BY	:		REGISTRATION DATE	: 15/Nov/2024 06:44 AM
BARCODE NO.	:01520817		COLLECTION DATE	: 15/Nov/2024 07:00AM
CLIENT CODE.	: KOS DIAGNOSTIC LAB		REPORTING DATE	: 15/Nov/2024 11:31AM
CLIENT ADDRESS	: 6349/1, NICHOLSON ROAI	), AMBALA CANTT		
Test Name		Value	Unit	<b>Biological Reference interval</b>
		LIPID PRO	FILE : BASIC	
CHOLESTEROL TO	TAL: SERUM	96.88	mg/dL	OPTIMAL: < 200.0
by CHOLESTEROL OX		00.00	ing/ uL	BORDERLINE HIGH: 200.0 -
				HIGH CHOLESTEROL: > OR = 240.0
FRIGLYCERIDES: S	ERUM	136.81	mg/dL	OPTIMAL: < 150.0
by GLYCEROL PHOSP	HATE OXIDASE (ENZYMATIC)		C	BORDERLINE HIGH: 150.0 -
				199.0 HIGH: 200.0 - 499.0
				VERY HIGH: $> OR = 500.0$
HDL CHOLESTEROI	L (DIRECT): SERUM	37.37	mg/dL	LOW HDL: < 30.0
by SELECTIVE INHIBITI	ION			BORDERLINE HIGH HDL: 30.0 60.0
				HIGH HDL: $> OR = 60.0$
LDL CHOLESTEROI		32.15	mg/dL	OPTIMAL: < 100.0
by CALCULATED, SPE	CTROPHOTOMETRY			ABOVE OPTIMAL: 100.0 - 129. BORDERLINE HIGH: 130.0 -
				159.0
				HIGH: 160.0 - 189.0
NON HDL CHOLEST		50 5 1	ma/dI	VERY HIGH: $> OR = 190.0$
by CALCULATED, SPE		59.51	mg/dL	OPTIMAL: < 130.0 ABOVE OPTIMAL: 130.0 - 159.
				BORDERLINE HIGH: 160.0 -
				189.0 UICU: 100.0 210.0
				HIGH: 190.0 - 219.0 VERY HIGH: > OR = 220.0
VLDL CHOLESTERC		27.36	mg/dL	0.00 - 45.00
by CALCULATED, SPE		I	mg/dL	350.00 - 700.00
by CALCULATED, SPE		330.57 <sup>L</sup>	mg/dL	550.00 - 700.00
CHOLESTEROL/HD		2.59	RATIO	LOW RISK: 3.30 - 4.40
by CALCULATED, SPE	UIRUPHUIUMEIRY			AVERAGE RISK: 4.50 - 7.0 MODERATE RISK: 7.10 - 11.0
				$\mathbf{WODERATE WOR. } 110 - 11.0$



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

KOS Central Lab:6349/1, Nicholson Road, Ambala Cantt -133 001, HaryanaKOS Molecular Lab:IInd Floor, Parry Hotel, Staff Road, Opp. GPO, Ambala Cantt -133 001, Haryana0171-2643898, +91 99910 43898care@koshealthcare.comwww.koshealthcare.comwww.koshealthcare.com



TEST PERFORMED AT KOS DIAGNOSTIC LAB, AMBALA CANTT.





		<b>hopra</b> & Microbiology) nsultant Pathologi		(Pathology)
NAME	: Mr. PARDEEP BANSAL			
AGE/ GENDER	: 62 YRS/MALE		PATIENT ID	: 1672557
COLLECTED BY	:		REG. NO./LAB NO.	: 012411150001
REFERRED BY	:		<b>REGISTRATION DATE</b>	: 15/Nov/2024 06:44 AM
BARCODE NO.	:01520817		<b>COLLECTION DATE</b>	: 15/Nov/2024 07:00AM
CLIENT CODE.	: KOS DIAGNOSTIC LAB		<b>REPORTING DATE</b>	: 15/Nov/2024 11:31AM
CLIENT ADDRESS	: 6349/1, NICHOLSON ROAD	, AMBALA CANT	Г	
Test Name		Value	Unit	<b>Biological Reference interval</b>
LDL/HDL RATIO: S by CALCULATED, SPE		0.86	RATIO	LOW RISK: 0.50 - 3.0 MODERATE RISK: 3.10 - 6.0 HIGH RISK: > 6.0
TRIGLYCERIDES/H by CALCULATED, SPE	IDL RATIO: SERUM	3.66	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.

 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.
 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 HDL

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





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

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







	<b>Dr. Vinay Chop</b> MD (Pathology & M Chairman & Consult	icrobiology)	Dr. Yugam MD ( CEO & Consultant	(Pathology)
NAME	: Mr. PARDEEP BANSAL			
AGE/ GENDER	: 62 YRS/MALE	I	PATIENT ID	: 1672557
COLLECTED BY	:	I	REG. NO./LAB NO.	: 012411150001
<b>REFERRED BY</b>	:	I	REGISTRATION DATE	: 15/Nov/2024 06:44 AM
BARCODE NO.	: 01520817	(	COLLECTION DATE	: 15/Nov/2024 07:00AM
CLIENT CODE.	: KOS DIAGNOSTIC LAB	I	REPORTING DATE	: 15/Nov/2024 11:31AM
CLIENT ADDRESS	: 6349/1, NICHOLSON ROAD, AM	IBALA CANTT		
Test Name		Value	Unit	<b>Biological Reference interval</b>
BILIRUBIN DIRECT	: SERUM pectrophotometry [ (CONJUGATED): SERUM SPECTROPHOTOMETRY	1.07 0.24	TEST (COMPLETE) mg/dL mg/dL	INFANT: 0.20 - 8.00 ADULT: 0.00 - 1.20 0.00 - 0.40
BILIKUBIN INDIKE by CALCULATED, SPE	CT (UNCONJUGATED): SERUM	0.83	mg/dL	0.10 - 1.00
SGOT/AST: SERUM	RIDOXAL PHOSPHATE	19.5	U/L	7.00 - 45.00
SGPT/ALT: SERUM		20.5	U/L	0.00 - 49.00
AST/ALT RATIO: S by CALCULATED, SPE		0.95	RATIO	0.00 - 46.00
ALKALINE PHOSPI		113.86	U/L	40.0 - 130.0
GAMMA GLUTAMY by SZASZ, SPECTROF	L TRANSFERASE (GGT): SERUM	25.91	U/L	0.00 - 55.0
TOTAL PROTEINS: by BIURET, SPECTRO	SERUM	7.53	gm/dL	6.20 - 8.00
ALBUMIN: SERUM by BROMOCRESOL G		4.25	gm/dL	3.50 - 5.50
GLOBULIN: SERUN by CALCULATED, SPE	1	3.28	gm/dL	2.30 - 3.50
A : G RATIO: SERUI	M	1.3	RATIO	1.00 - 2.00

by CALCULATED, SPECTROPHOTOMETRY

## 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)





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

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







	Dr. Vinay Cho MD (Pathology & M Chairman & Consu	licrobiology)	ugam Chopra MD (Pathology) sultant Pathologist
NAME	: Mr. PARDEEP BANSAL		
AGE/ GENDER	: 62 YRS/MALE	PATIENT ID	: 1672557
COLLECTED BY	:	<b>REG. NO./LAB NO.</b>	: 012411150001
<b>REFERRED BY</b>	:	<b>REGISTRATION DA</b>	ATE : 15/Nov/2024 06:44 AM
BARCODE NO.	:01520817	COLLECTION DATE	E : 15/Nov/2024 07:00AM
CLIENT CODE.	: KOS DIAGNOSTIC LAB	<b>REPORTING DATE</b>	: 15/Nov/2024 11:31AM
CLIENT ADDRESS	: 6349/1, NICHOLSON ROAD, A	MBALA CANTT	
Test Name		Value Uni	t Biological Reference interval

#### DECREASED:

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).

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



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







	Dr. Vinay Cho MD (Pathology & N Chairman & Consu	1icrobiology)	Dr. Yugam MD ( CEO & Consultant	(Pathology)
NAME	: Mr. PARDEEP BANSAL			
AGE/ GENDER	: 62 YRS/MALE	PA	TIENT ID	: 1672557
COLLECTED BY	:	RI	EG. NO./LAB NO.	: 012411150001
<b>REFERRED BY</b>	:	RI	EGISTRATION DATE	: 15/Nov/2024 06:44 AM
BARCODE NO.	:01520817	CO	<b>DLLECTION DATE</b>	: 15/Nov/2024 07:00AM
CLIENT CODE.	: KOS DIAGNOSTIC LAB		EPORTING DATE	: 15/Nov/2024 11:39AM
CLIENT ADDRESS	: 6349/1, NICHOLSON ROAD, Al	MBALA CANTT		
Test Name		Value	Unit	<b>Biological Reference interval</b>
	KIDNI	EY FUNCTION	TEST (COMPLETE)	
UREA: SERUM		35.12	mg/dL	10.00 - 50.00
by UREASE - GLUTAN CREATININE: SERI	IATE DEHYDROGENASE (GLDH)	1.35	mg/dL	0.40 - 1.40
by ENZYMATIC, SPEC	TROPHOTOMETERY			
BLOOD UREA NITE by CALCULATED, SPE	ROGEN (BUN): SERUM	16.41	mg/dL	7.0 - 25.0
	ROGEN (BUN)/CREATININE	12.16	RATIO	10.0 - 20.0
RATIO: SERUM	ECTROPHOTOMETRY			
UREA/CREATININ		26.01	RATIO	
by CALCULATED, SPE		3.63		2.00 7.70
URIC ACID: SERUM by URICASE - OXIDAS		3.03	mg/dL	3.60 - 7.70
CALCIUM: SERUM		9.76	mg/dL	8.50 - 10.60
by ARSENAZO III, SPE PHOSPHOROUS: SE		3.94	mg/dL	2.30 - 4.70
	DATE, SPECTROPHOTOMETRY		5	
ELECTROLYTES		197.9		125.0 150.0
SODIUM: SERUM by ISE (ION SELECTIV	/E ELECTRODE)	137.3	mmol/L	135.0 - 150.0
POTASSIUM: SERU		4.12	mmol/L	3.50 - 5.00
by ISE (ION SELECTIV CHLORIDE: SERUM		102.98	mmol/L	90.0 - 110.0
by ISE (ION SELECTIV				
	<b>IERULAR FILTERATION RATE</b>			
ESTIMATED GLOM (eGFR): SERUM by CALCULATED	ERULAR FILTERATION RATE	59.4		
INTERPRETATION:				

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.

2. Catabolic states with increased tissue breakdown.

3. GI haemorrhage.



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

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







<b>Dr. Vinay Chopra</b> MD (Pathology & Microbiology) Chairman & Consultant Pathologist			robiology)		<b>am Chopra</b> 1D (Pathology) ant Pathologist	
NAME	: Mr. PARDEE	P BANSAL				
AGE/ GENDER	: 62 YRS/MALE		PAT	IENT ID	: 1672557	
COLLECTED BY				NO./LAB NO.	: 012411150	001
	•					
EFERRED BY	:			ISTRATION DAT		
BARCODE NO.	:01520817		COLI	LECTION DATE	:15/Nov/2024	4 07:00AM
LIENT CODE.	: KOS DIAGNO	STIC LAB	REP	ORTING DATE	:15/Nov/2024	4 11:39AM
LIENT ADDRESS	: 6349/1, NICH	IOLSON ROAD, AMB	ALA CANTT			
Fest Name			Value	Unit	Biolo	ogical Reference interv
9. Certain drugs (e.g. <b>NCREASED RATIO (&gt;2</b> 1. Postrenal azotemia 2. Prerenal azotemia	ass (subnormal c tetracycline, glu 0:1) WITH ELEVA (BUN rises dispr superimposed of	TED CREATININE LEV oportionately more n renal disease.	ELS:	e.g. obstructive ur	opathy).	
<ol> <li>Certain drugs (e.g.</li> <li>NCREASED RATIO (&gt;2</li> <li>Postrenal azotemia</li> <li>Prerenal azotemia</li> <li>Perenal azotemia</li> <li>CECREASED RATIO (&lt;1</li> <li>Acute tubular necr</li> <li>Low protein diet ar</li> <li>Severe liver disease</li> <li>Other causes of de</li> <li>Repeated dialysis (</li> <li>SIADH (syndrome c</li> <li>Pregnancy.</li> <li>PECREASED RATIO (&lt;1</li> <li>Phenacimide thera</li> <li>Rhabdomyolysis (r</li> <li>Muscular patients</li> <li>NAPPROPIATE RATIO</li> <li>Diabetic ketoacido</li> <li>hould produce an in</li> <li>Cephalosporin ther</li> <li>STAGE</li> </ol>	ass (subnormal c tetracycline, glue 0:1) WITH ELEVA (BUN rises dispr superimposed of 0:1) WITH DECRE osis. Id starvation. 2: creased urea syn urea rather than monemias (urea f inappropiate a 0:1) WITH INCRE oy (accelerates c eleases muscle c who develop ren sis (acetoacetate creased BUN/cre apy (interferes w LAR FILTERATION	reatinine production cocorticoids) <b>TED CREATININE LEV</b> oportionately more n renal disease. <b>ASED BUN :</b> thesis. creatinine diffuses is virtually absent in ntidiuretic harmone) <b>ASED CREATININE:</b> onversion of creatin reatinine). al failure. causes false increase atinine ratio). rith creatinine measu <b>I RATE:</b> <b>DESCRIPTION</b>	ELS: than creatinine) (e blood). due to tubular se e to creatinine). se in creatinine wi urement).	r fluid). cretion of urea. th certain method n/1.73m2 )	lologies,resulting in n	normal ratio when dehydr
Certain drugs (e.g. NCREASED RATIO (>2 Postrenal azotemia Prerenal azotemia DECREASED RATIO (<1 Acute tubular necr Low protein diet ar Severe liver disease Other causes of de Repeated dialysis ( Inherited hyperam SIADH (syndrome of Pregnancy. DECREASED RATIO (<1 Phenacimide thera Rhabdomyolysis (r Muscular patients NAPPROPIATE RATIO Diabetic ketoacido hould produce an in Cephalosporin ther STIMATED GLOMERL CKD STAGE	ass (subnormal c tetracycline, glue 0:1) WITH ELEVA (BUN rises dispr superimposed of 0:1) WITH DECRE osis. Id starvation. 2: creased urea syn urea rather than monemias (urea f inappropiate a 0:1) WITH INCRE oy (accelerates c eleases muscle c who develop ren sis (acetoacetate creased BUN/cre apy (interferes w LAR FILTERATION Norn	reatinine production cocorticoids) <b>TED CREATININE LEV</b> oportionately more n renal disease. <b>ASED BUN :</b> thesis. creatinine diffuses is virtually absent in ntidiuretic harmone) <b>ASED CREATININE:</b> onversion of creatin reatinine). al failure. causes false increase atinine ratio). rith creatinine mease <b>IRATE:</b> <b>DESCRIPTION</b> nal kidney function	ELS: than creatinine) (e blood). due to tubular se e to creatinine). se in creatinine wi urement). GFR ( mL/mi >9	r fluid). cretion of urea. th certain method n/1.73m2 )	lologies,resulting in n ASSOCIATED FINDING	GS
. Certain drugs (e.g. <b>NCREASED RATIO (&gt;2</b> . Postrenal azotemia . Prerenal azotemia <b>DECREASED RATIO (</b> <1 . Acute tubular necr . Low protein diet ar . Severe liver disease . Other causes of de . Repeated dialysis ( . Inherited hyperam . SIADH (syndrome c . Pregnancy. <b>DECREASED RATIO (</b> <1 . Phenacimide thera . Rhabdomyolysis (r . Muscular patients <b>NAPPROPIATE RATIO</b> . Diabetic ketoacido hould produce an in . Cephalosporin ther <b>STIMATED GLOMERL</b> <b>CKD STAGE</b>	ass (subnormal of tetracycline, glue 0:1) WITH ELEVA (BUN rises dispr superimposed of 0:1) WITH DECRE osis. Id starvation. 2: creased urea syn urea rather than monemias (urea f inappropiate a 0:1) WITH INCRE oy (accelerates of eleases muscle of who develop ren sis (acetoacetate creased BUN/ore apy (interferes w LAR FILTERATION Norm Kio	reatinine production cocorticoids) <b>TED CREATININE LEV</b> oportionately more n renal disease. <b>ASED BUN :</b> thesis. creatinine diffuses is virtually absent in ntidiuretic harmone) <b>ASED CREATININE:</b> onversion of creatin reatinine). al failure. causes false increase atinine ratio). rith creatinine measu <b>IRATE:</b> <b>DESCRIPTION</b> nal kidney function iney damage with	ELS: than creatinine) (e blood). due to tubular se e to creatinine). se in creatinine wi urement).	r fluid). cretion of urea. th certain method n/1.73m2 ) 0	lologies,resulting in n ASSOCIATED FINDING No proteinuria Presence of Protein	GS
. Certain drugs (e.g. NCREASED RATIO (>2 . Postrenal azotemia . Prerenal azotemia DECREASED RATIO (<1 . Acute tubular necr . Low protein diet ar . Severe liver disease . Other causes of de . Repeated dialysis ( . Inherited hyperam . SIADH (syndrome c . Pregnancy. DECREASED RATIO (<1 . Phenacimide thera . Rhabdomyolysis (r . Muscular patients NAPPROPIATE RATIO . Diabetic ketoacido hould produce an in . Cephalosporin ther STIMATED GLOMERL CKD STAGE G1 G2	ass (subnormal of tetracycline, glue 0:1) WITH ELEVA (BUN rises dispr superimposed of 0:1) WITH DECRE osis. Id starvation. 2: creased urea syn urea rather than monemias (urea f inappropiate a 0:1) WITH INCRE oy (accelerates of eleases muscle of who develop ren sis (acetoacetate creased BUN/crea apy (interferes w LAR FILTERATION Norm Norm	reatinine production cocorticoids) <b>TED CREATININE LEV</b> oportionately more n renal disease. <b>ASED BUN :</b> thesis. creatinine diffuses is virtually absent in ntidiuretic harmone) <b>ASED CREATININE:</b> onversion of creatin reatinine). al failure. causes false increase atinine ratio). th creatinine mease <b>IRATE:</b> <b>DESCRIPTION</b> nal kidney function iney damage with rmal or high GFR_	ELS: than creatinine) (e but of extracellula blood). due to tubular se e to creatinine). se in creatinine wi urement). GFR ( mL/mi >9 >9	r fluid). cretion of urea. th certain method n/1.73m2 ) 0	lologies,resulting in n ASSOCIATED FINDING	GS
Certain drugs (e.g. NCREASED RATIO (>2 Postrenal azotemia Prerenal azotemia DECREASED RATIO (<1 Acute tubular necr Low protein diet ar Severe liver disease Other causes of de Repeated dialysis ( Inherited hyperam SIADH (syndrome of Pregnancy. DECREASED RATIO (<1 Phenacimide thera Rhabdomyolysis (r Muscular patients NAPPROPIATE RATIO Diabetic ketoacido hould produce an in Cephalosporin ther STIMATED GLOMERL CKD STAGE	ass (subnormal of tetracycline, gluo 0:1) WITH ELEVA (BUN rises dispr superimposed of 0:1) WITH DECRE osis. Id starvation. 2: creased urea syn urea rather than monemias (urea f inappropiate a 0:1) WITH INCRE oy (accelerates of eleases muscle of who develop ren sis (acetoacetate creased BUN/ore apy (interferes w LAR FILTERATION Norn Kio Norn	reatinine production cocorticoids) <b>TED CREATININE LEV</b> oportionately more n renal disease. <b>ASED BUN :</b> thesis. creatinine diffuses is virtually absent in ntidiuretic harmone) <b>ASED CREATININE:</b> onversion of creatin reatinine). al failure. causes false increas atinine ratio). rith creatinine measu <b>I RATE:</b> <b>DESCRIPTION</b> nal kidney function iney damage with rmal or high GFR_ d decrease in GFR_	ELS: than creatinine) (e but of extracellula blood). due to tubular se e to creatinine). se in creatinine wi urement). GFR (mL/mi >9 >9 60 -	r fluid). cretion of urea. th certain method n/1.73m2 ) 0 0	lologies,resulting in n ASSOCIATED FINDING No proteinuria Presence of Protein	GS
Certain drugs (e.g.     NCREASED RATIO (>2     Postrenal azotemia     Prerenal azotemia     DECREASED RATIO (<1     Acute tubular necr     Low protein diet ar     Severe liver disease     Other causes of de     Repeated dialysis (     Inherited hyperam     SIADH (syndrome c     Rhabdomyolysis (r     Rhabdomyolysis (r     NAPPROPIATE RATIO     Diabetic ketoacido     hould produce an in     Cephalosporin ther     STIMATED GLOMERL     G1     G2	ass (subnormal of tetracycline, gluo 0:1) WITH ELEVA (BUN rises dispr superimposed of 0:1) WITH DECRE osis. Id starvation. 2: creased urea syn urea rather than monemias (urea f inappropiate a 0:1) WITH INCRE oy (accelerates of eleases muscle of who develop ren sis (acetoacetate creased BUN/ore apy (interferes w LAR FILTERATION Norm Norm Nord Nord	reatinine production cocorticoids) <b>TED CREATININE LEV</b> oportionately more n renal disease. <b>ASED BUN :</b> thesis. creatinine diffuses is virtually absent in ntidiuretic harmone) <b>ASED CREATININE:</b> onversion of creatin reatinine). al failure. causes false increase atinine ratio). th creatinine mease <b>IRATE:</b> <b>DESCRIPTION</b> nal kidney function iney damage with rmal or high GFR_	ELS: than creatinine) (e but of extracellula blood). due to tubular se e to creatinine). se in creatinine wi urement). GFR (mL/mi >9 >9 60 -	r fluid). cretion of urea. th certain method n/1.73m2 ) 0 0 89 59	lologies,resulting in n ASSOCIATED FINDING No proteinuria Presence of Protein	GS





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 Patholog		(Pathology)
NAME	: Mr. PARDEEP BANSAL		
AGE/ GENDER	: 62 YRS/MALE	PATIENT ID	: 1672557
COLLECTED BY	:	REG. NO./LAB NO.	: 012411150001
<b>REFERRED BY</b>	:	<b>REGISTRATION DATE</b>	: 15/Nov/2024 06:44 AM
BARCODE NO.	: 01520817	<b>COLLECTION DATE</b>	: 15/Nov/2024 07:00AM
CLIENT CODE.	: KOS DIAGNOSTIC LAB	<b>REPORTING DATE</b>	: 15/Nov/2024 11:39AM
CLIENT ADDRESS	: 6349/1, NICHOLSON ROAD, AMBALA CANT	Т	
Test Name	Value	Unit	Biological Reference interval

COMMENTS:

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.
 eGFR calculated using the 2009 CKD-EPI creatinine equation and GFR category reported as per KDIGO guideline 2012
 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 of CFD with the commended to measure

3. In patients, with eGFR cleaning between 45-59 minimit 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

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







	<b>Dr. Vinay Chopra</b> MD (Pathology & Microbiology) Chairman & Consultant Pathologist				(Pathology)
NAME	: Mr. PARDEE	P BANSAL			
AGE/ GENDER	: 62 YRS/MAL	E		PATIENT ID	: 1672557
COLLECTED BY	:			REG. NO./LAB NO.	:012411150001
REFERRED BY	:			REGISTRATION DATE	: 15/Nov/2024 06:44 AM
BARCODE NO.	:01520817			COLLECTION DATE	: 15/Nov/2024 07:00AM
CLIENT CODE.	: KOS DIAGNO	STIC LAB		REPORTING DATE	: 15/Nov/2024 11:31AM
CLIENT ADDRESS	: 6349/1, NICI	HOLSON ROAD, AM	BALA CANTT		
Test Name			Value	Unit	Biological Reference interva
			IRON	PROFILE	
IRON: SERUM by FERROZINE, SPEC		,	39.2 <sup>L</sup>	μg/dL	59.0 - 158.0
UNSATURATED IR			276.2	μg/dL	150.0 - 336.0
SERUM by FERROZINE, SPEC					
TOTAL IRON BIND			315.4	μg/dL	230 - 430
SERUM					
by SPECTROPHOTOM %TRANSFERRIN S		ERUM	12.43 <sup>L</sup>	%	15.0 - 50.0
by CALCULATED, SPE	CTROPHOTOMET				
TRANSFERRIN: SE by SPECTROPHOTOM			223.93	mg/dL	200.0 - 350.0
INTERPRETATION:-	(				
VARIAB	BLES	ANEMIA OF CHRO	NIC DISEASE	IRON DEFICIENCY ANEMIA	THALASSEMIA α/β TRAIT
SERUM II	RON:	Normal to Re	educed	Reduced	Normal

VARIABLES	ANEMIA OF CHRONIC DISEASE	IRON DEFICIENCY ANEMIA	THALASSEMIA α/β TRAIT	
SERUM IRON:	Normal to Reduced	Reduced	Normal	
TOTAL IRON BINDING CAPACITY:	Decreased	Increased	Normal	
% TRANSFERRIN SATURATION:	Decreased	Decreased < 12-15 %	Normal	
SERUM FERRITIN:	Normal to Increased	Decreased	Normal or Increased	
DON	internet te morodood			

IRON:

1.Serum iron studies is recommended for differential diagnosis of microcytic hypochromic anemia.i.e iron deficiency anemia, zinc deficiency

anemia, anemia of chronic disease and thalassemia syndromes.
 It is essential to isolate iron deficiency anemia from Beta thalassemia syndromes because during iron replacement which is therapeutic for iron deficiency anemia, is severely contra-indicated in Thalassemia.
 **TOTAL IRON BINDING CAPACITY (TIBC):** It is a direct measure of protein transferrin which transports iron from the gut to storage sites in the bone marrow.

## % TRANSFERRIN SATURATION:

1. Occurs in idiopathic hemochromatosis and transfusional hemosiderosis where no unsaturated iron binding capacity is available for iron mobilization. Similar condition is seen in congenital deficiency of transferrin.





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

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

KOS Central Lab: 6349/1, Nicholson Road, Ambala Cantt -133 001, Haryana KOS Molecular Lab: IInd Floor, Parry Hotel, Staff Road, Opp. GPO, Ambala Cantt -133 001, Haryana 0171-2643898, +91 99910 43898 | care@koshealthcare.com | www.koshealthcare.com



TEST PERFORMED AT KOS DIAGNOSTIC LAB. AMBALA CANTT





	Dr. Vinay Cl MD (Pathology a Chairman & Col		M	<b>m Chopra</b> D (Pathology) nt Pathologist	
NAME	: Mr. PARDEEP BANSAL				
AGE/ GENDER	: 62 YRS/MALE		PATIENT ID	: 1672557	
COLLECTED BY	:		REG. NO./LAB NO.	:012411150001	
REFERRED BY	:		<b>REGISTRATION DATE</b>	: 15/Nov/2024 06:44 AM	
BARCODE NO.	: 01520817		<b>COLLECTION DATE</b>	: 15/Nov/2024 07:00AM	
CLIENT CODE.	: KOS DIAGNOSTIC LAB		REPORTING DATE	: 15/Nov/2024 11:31AM	
CLIENT ADDRESS	: 6349/1, NICHOLSON ROAD,	AMBALA CANT	Г		
Test Name		Value	Unit	Biological Refere	ence interval
		ENDOC	RINOLOGY		
	TI	<b>IYROID FUN</b>	CTION TEST: TOTAL		
TRIIODOTHYRONI	NE (T3): SERUM IESCENT MICROPARTICLE IMMUNOA	1.011 ASSAY)	ng/mL	0.35 - 1.93	
THYROXINE (T4): S	SERUM iescent microparticle immunoa	9 ISSAY)	µgm/d	L 4.87 - 12.60	
	ATING HORMONE (TSH): SER		µIU/m	L 0.35 - 5.50	
3rd GENERATION, ULT <u>INTERPRETATION</u> :	RASENSITIVE				
day has influence on the trilodothyronine (T3).Fai	measured serum TSH concentrations. T	SH stimulates the p	roduction and secretion of the	pm. The variation is of the order of 50% metabolically active hormones, thyrox ther underproduction (hypothyroidism	kine (T4)and
CLINICAL CONDITION	Т3		T4	TSH	
Primary Hypothyroidis	m: Reduced		Reduced	Increased (Significantly)	

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:-

TEST PERFORMED AT KOS DIAGNOSTIC LAB, AMBALA CANTT

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.

TRIIODOTH	YRONINE (T3)	THYROXINE (T4)		THYROID STIMULATING HORMONE (TS	
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
6 - 12 Months	0.74 - 2.40	6 - 12 Months	7.10 - 16.16	6 – 12 Months	0.70 - 7.00





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

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







	MD	Vinay Chopra (Pathology & Microbiology) irman & Consultant Pathologis	Ň	<b>am Chopra</b> ID (Pathology) ant Pathologist
NAME	: Mr. PARDEEP B	ANSAL		
AGE/ GENDER	: 62 YRS/MALE		PATIENT ID	: 1672557
COLLECTED BY	:		REG. NO./LAB NO.	: 012411150001
REFERRED BY	:		<b>REGISTRATION DATE</b>	: 15/Nov/2024 06:44 AM
BARCODE NO.	:01520817		COLLECTION DATE	: 15/Nov/2024 07:00AM
CLIENT CODE.	: KOS DIAGNOSTI	C LAB	<b>REPORTING DATE</b>	: 15/Nov/2024 11:31AM
CLIENT ADDRESS	: 6349/1, NICHOI	SON ROAD, AMBALA CANTT	·	
<u></u>				
Test Name		Value	Unit	<b>Biological Reference interval</b>
1 - 10 Years	0.92 - 2.28 1 -	10 Years 6.00 - 13.80	1 – 10 Years 0	0.60 - 5.50

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	
	RECOM	MENDATIONS OF TSH LE	VELS DURING PREGN	IANCY ( µIU/mL)		
	1st Trimester			0.10 - 2.50		
	2nd Trimester			0.20 - 3.00		ı
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)







MD (Patho	ay Chopra blogy & Microbiology) & Consultant Pathologist CE	Dr. Yugam MD O & Consultant	(Pathology)
NAME : Mr. PARDEEP BANSA	L		
AGE/ GENDER : 62 YRS/MALE	PATIENT	ID	: 1672557
COLLECTED BY :	REG. NO./	LAB NO.	:012411150001
<b>REFERRED BY</b> :	REGISTRA	TION DATE	: 15/Nov/2024 06:44 AM
<b>BARCODE NO.</b> : 01520817	COLLECTI		: 15/Nov/2024 07:00AM
<b>CLIENT CODE.</b> : KOS DIAGNOSTIC LAB		NG DATE	: 15/Nov/2024 05:07PM
<b>CLIENT ADDRESS</b> : 6349/1, NICHOLSON H	ROAD, AMBALA CANTT		
Test Name	Value	Unit	Biological Reference interval
	CLINICAL PATHO	LOGY	
URIN	E ROUTINE & MICROSCOP	IC EXAMINA	ATION
PHYSICAL EXAMINATION			
QUANTITY RECIEVED	10	ml	
by DIP STICK/REFLECTANCE SPECTROPHOTOMET COLOUR	PALE YELLOW		PALE YELLOW
by DIP STICK/REFLECTANCE SPECTROPHOTOMET			
TRANSPARANCY by DIP STICK/REFLECTANCE SPECTROPHOTOMET	HAZY		CLEAR
SPECIFIC GRAVITY	1.02		1.002 - 1.030
by DIP STICK/REFLECTANCE SPECTROPHOTOMET CHEMICAL EXAMINATION	RT		
REACTION	ACIDIC		
by DIP STICK/REFLECTANCE SPECTROPHOTOMET PROTEIN	RY Negative		NEGATIVE (-ve)
by DIP STICK/REFLECTANCE SPECTROPHOTOMET	TRY 5		NEGATIVE (-ve)
SUGAR by DIP STICK/REFLECTANCE SPECTROPHOTOME	2+		NEGATIVE (-ve)
рН	<=5.0		5.0 - 7.5
by DIP STICK/REFLECTANCE SPECTROPHOTOMET BILIRUBIN	Negative		NEGATIVE (-ve)
by DIP STICK/REFLECTANCE SPECTROPHOTOMET	RY		
NITRITE by DIP STICK/REFLECTANCE SPECTROPHOTOMET	Negative RY.		NEGATIVE (-ve)
UROBILINOGEN by DIP STICK/REFLECTANCE SPECTROPHOTOMET	Normal	EU/dL	0.2 - 1.0
KETONE BODIES	Negative		NEGATIVE (-ve)
by DIP STICK/REFLECTANCE SPECTROPHOTOMET BLOOD	RY Negative		NEGATIVE (-ve)
by DIP STICK/REFLECTANCE SPECTROPHOTOMET	RY		
ASCORBIC ACID by DIP STICK/REFLECTANCE SPECTROPHOTOMET	NEGATIVE (-ve)		NEGATIVE (-ve)
MICROSCOPIC EXAMINATION			
RED BLOOD CELLS (RBCs)	NEGATIVE (-ve)	/HPF	0 - 3



KOS Central Lab: 6349/1, Nicholson Road, Ambala Cantt -133 001, Haryana

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

KOS Molecular Lab: IInd Floor, Parry Hotel, Staff Road, Opp. GPO, Ambala Cantt - 133 001, Haryana

0171-2643898, +91 99910 43898 | care@koshealthcare.com | www.koshealthcare.com

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



TEST PERFORMED AT KOS DIAGNOSTIC LAB, AMBALA CANTT.





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

NAME	: Mr. PARDEEP BANSAL				
AGE/ GENDER	: 62 YRS/MALE		PATIENT ID	: 1672557	
COLLECTED BY	:		<b>REG. NO./LAB NO.</b>	: 012411150001	
<b>REFERRED BY</b>	:		<b>REGISTRATION DATE</b>	: 15/Nov/2024 06:44 AM	
BARCODE NO.	: 01520817		<b>COLLECTION DATE</b>	: 15/Nov/2024 07:00AM	
CLIENT CODE.	: KOS DIAGNOSTIC LAB	<b>REPORTING DATE</b>		: 15/Nov/2024 05:07PM	
CLIENT ADDRESS	: 6349/1, NICHOLSON ROAD, AMBALA CANTT				
Test Name		Value	Unit	Biological Reference interval	
PUS CELLS		2-4	/HPF	0 - 5	

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

1-2	/HPF	ABSENT
NEGATIVE (-ve)		NEGATIVE (-ve)
ABSENT		ABSENT
	NEGATIVE (-ve) NEGATIVE (-ve) NEGATIVE (-ve) NEGATIVE (-ve)	NEGATIVE (-ve) NEGATIVE (-ve) NEGATIVE (-ve) NEGATIVE (-ve)

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



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

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

