

DISCHARGE SUMMARY

NAME: MR.MYKHAILO
CODE NO: IP15-9795
MHID: 299702

32 YEARS/ Male

D.O.A: 29.12.2015

D.O.D: 02.01.2016

ROOM: 2501

CARDIAC SURGEON : Dr. K. R. BALAKRISHNAN

CO - CONSULTANT : DR. RAVIKUMAR

DIAGNOSIS : PRIMARY PULMONARY HYPERTENSION WITH RIGHT HEART FAILURE

HISTORY: Mr. Mykhailo, 32 years old male is a known case of primary pulmonary hypertension with congestive cardiac failure. He presented with the complaints of giddiness. Now admitted for further management.

BLOOD BIOCHEMISTRY: (Detailed report enclosed).

COURSE IN THE HOSPITAL: Patient was admitted in CTICU. Necessary investigations were done. He was treated with diuretics and other cardiac supportive measures. After stabilization he was shifted to ward. He was symptomatically improved and discharged with the following advice.

MEDICATIONS:

TAB. LASIX	40mg	1-0-1	x	to continue
TAB. DYTOR PLUS	20mg	1-0-0	x	to continue
TAB. SILDENAFIL	50mg	1-1-1	x	to continue
TAB. ALDACTONE	25mg	1-0-0	x	to continue
TAB. WARFARIN	5mg	1-0-0	x	to continue
CAP. RIBAVARIN	400mg	1-0-1	x	to continue
TAB. SOFOSBUVIR	400mg	0-0-1	x	to continue
TAB. ZYTANIX	5mg	1-0-1	x	to continue
TAB. POTKLOR	2 tsp	1-0-1	x	to continue
TAB. ENDOBLOC	5mg	1-0-0	x	to continue

REVIEW WITH Dr. K.R. BALAKRISHNAN/ DR. RAVIKUMAR AS ADVICE.

ANY INADVERTANT DISPARITY IN THIS SUMMARY SHOULD BE BROUGHT TO OUR NOTICE WITHIN ONE WEEK FROM THE TIME OF DISCHARGE AND SUITABLE CORRECTIONS MADE IMMEDIATELY.

Dr. K.R. BALAKRISHNAN
CONSULTANT OF CARDIOLOGIST

DR. RAVIKUMAR
CONSULTANT CARDIOLOGIST

PATIENT NAME : MYKHAILO

PATIENT ID : FH04.299702

CLIENT PATIENT ID : UHID:299702

ACCESSION NO : 01040L005660 AGE : 32 Years SEX : Male DATE OF BIRTH :

DRAWN : 31/12/2015 12:24 RECEIVED : 31/12/2015 12:27 REPORTED : 31/12/2015 13:20

CLIENT NAME : FORTIS MALAR HOSPITAL IPD

REFERRING DOCTOR : DR. BALAKRISHNAN KR

CLINICAL INFORMATION :

IPID : IP15-9795- IPD- 5TH FLOOR A BLOCK

Test Report Status	Final	Results	Biological Reference Interval	Units
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BIO CHEMISTRY

ELECTROLYTES (NA/K/CL), SERUM

SODIUM	125	Low	136 - 145	mmol/L
METHOD : IMT - INDIRECT				
POTASSIUM	3.50		3.50 - 5.10	mmol/L
METHOD : IMT - INDIRECT				
CHLORIDE	89	Low	98 - 107	mmol/L
METHOD : IMT - INDIRECT				

BILIRUBIN (TOTAL, DIRECT, INDIRECT), SERUM

BILIRUBIN, TOTAL	2.14	High	0.2 - 1.0	mg/dL
METHOD : JENDRASSIK AND GROFF				
BILIRUBIN, DIRECT	1.12	High	0.0 - 0.2	mg/dL
METHOD : JENDRASSIK (DIAZO)				
BILIRUBIN, INDIRECT	1.02	High	0.1 - 1.0	mg/dL
METHOD : JENDRASSIK (DIAZO)				

Interpretation(s)

ELECTROLYTES (NA/K/CL), SERUM-
ELECTROLYTES (NA/K/CL), SERUM

Sodium levels are increased in dehydration, Cushing's syndrome, aldosteronism & decreased in Addison's disease, hypopituitarism, liver disease. Hypokalemia (low K) is common in vomiting, diarrhea, alcoholism, folic acid deficiency and primary aldosteronism. Hyperkalemia may be seen in end-stage renal failure, hemolysis, trauma, Addison's disease, metabolic acidosis, acute starvation, dehydration, and with rapid K infusion. Chloride is increased in dehydration, renal tubular acidosis (hyperchloremic metabolic acidosis), acute renal failure, metabolic acidosis associated with prolonged diarrhea and loss of sodium bicarbonate, diabetes insipidus, adrenocortical hyperfunction, cyanide intoxication and with excessive infusion of isotonic saline or extremely high dietary intake of salt. Chloride is decreased in overhydration, chronic respiratory acidosis, losing nephritis, metabolic alkalosis, congestive heart failure, Addisonian crisis, certain types of metabolic acidosis, persistent gastric secretion and prolonged vomiting.

BILIRUBIN (TOTAL, DIRECT, INDIRECT), SERUM-
BILIRUBIN (TOTAL, DIRECT, INDIRECT), SERUM

Bilirubin is a yellowish pigment found in bile and is a breakdown product of normal heme catabolism. Bilirubin is excreted in bile and urine, and elevated levels may give a yellowish discoloration in jaundice. Elevated levels result from increased bilirubin production (eg, hemolysis and ineffective erythropoiesis), decreased bilirubin excretion (eg, liver dysfunction and hepatitis), and abnormal bilirubin metabolism (eg, hereditary and neonatal jaundice). Conjugated (direct) bilirubin is elevated more than unconjugated (indirect) bilirubin in viral hepatitis, drug reactions, alcoholic liver disease. Conjugated (direct) bilirubin is also elevated more than unconjugated (indirect) bilirubin when there is some kind of blockage of the bile ducts like in gallstones getting into the bile ducts, tumors & scarring of the bile ducts. Increased unconjugated (indirect) bilirubin may be a result of hemolytic or pernicious anemia, transfusion reaction & a common metabolic condition termed Gilbert syndrome, due to low levels of the enzyme that cleaves sugar molecules to bilirubin.

1 Bilirubin -
Reference: Wallach's Interpretation of Diagnostic tests, 9th ed

2 Bilirubin -
Reference: Tietz Text book of Clinical Chemistry & Molecular Diagnostics, 4th ed

****End Of Report****

Please visit www.srlworld.com for related Test Information for this accession



Dr. Selva Kumaran, M.D.
Pathologist

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Sinus tachycardia.....Rate> 99
 PR 101 . RSBB and LPFB.....QRSd >120ms, axis(90,210)
 QRSd 149 . Inferior infarct, age indeterminate.....Q>35ms, T neg, II III aVF
 QT 392 . Abnorm T, consider ischemia, anterolateral lds.....T <-0.20mV, I aVL V2-V6
 QTc 515

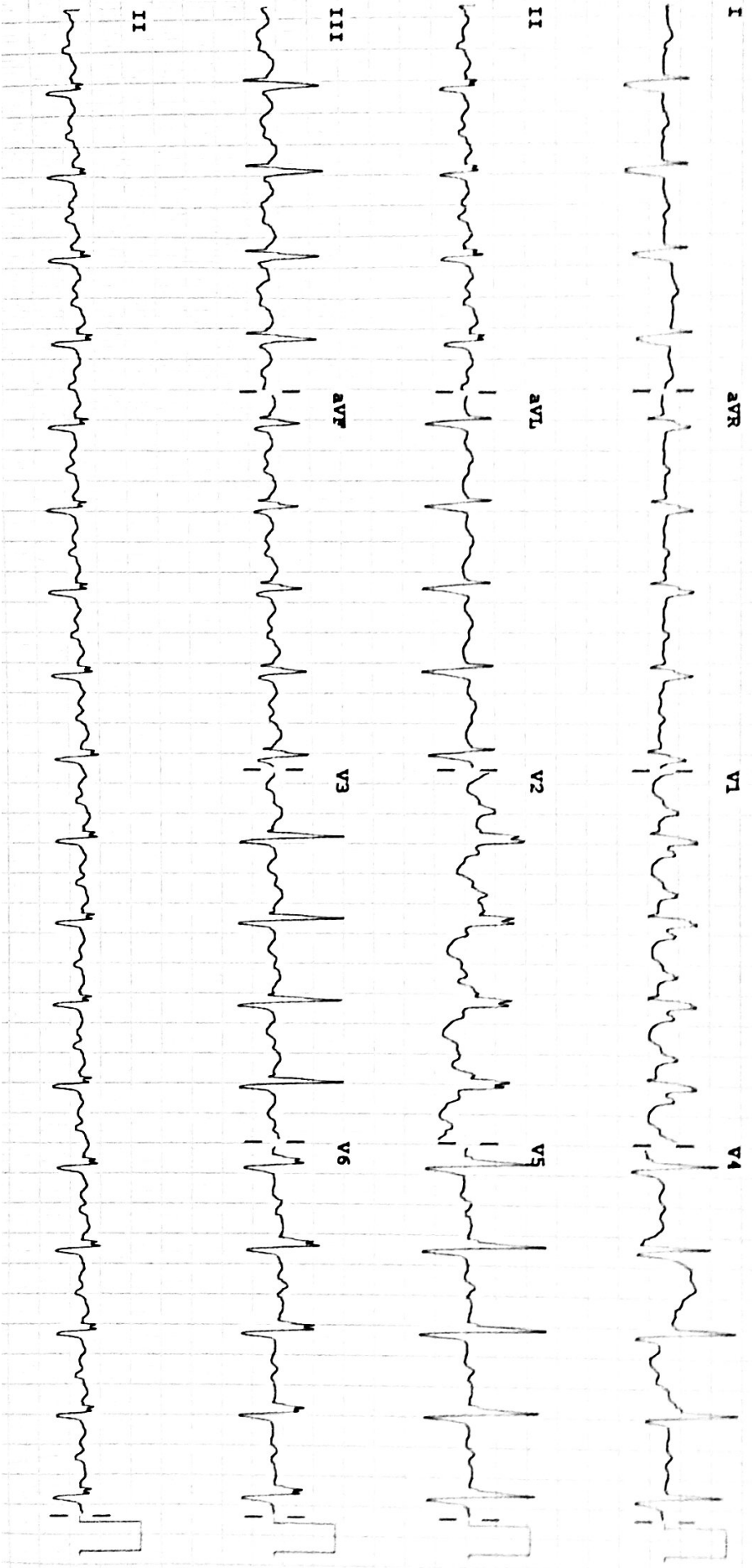
--Axis--

P 101
 QRS 119
 T -57

- ABNORMAL ECG -

12 Lead: Standard Placement

Unconfirmed Diagnosis



LABORATORY REPORT



PATIENT NAME : MYKHAILO

PATIENT ID : **FH04.299702**

CLIENT PATIENT ID : UHID:299702

ACCESSION NO : **01040L005279** AGE : 32 Years SEX : Male DATE OF BIRTH :
 DRAWN : 29/12/2015 22:24 RECEIVED : 29/12/2015 22:15 REPORTED : 29/12/2015 23:17

CLIENT NAME : **FORTIS MALAR HOSPITAL IPD** REFERRING DOCTOR : DR. BalakrishnanK.R

CLINICAL INFORMATION :

IPID :IP15-9795- IPD- 4TH FLOOR A BLOCK CITCU

Test Report Status	Final	Results	Biological Reference Interval	Units
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HAEMATOLOGY

CBC WITH ESR (CBC+PS+ESR) EDTA WHOLE BLOOD/SMEAR

COMPLETE BLOOD COUNT

RED BLOOD CELL COUNT	3.14	Low	4.5 - 5.5	mil/ μ L
HEMOGLOBIN	10.7	Low	13.0 - 17.0	g/dL
HEMATOCRIT	33.4	Low	40 - 50	%
MEAN CORPUSCULAR VOL	106.4	High	83 - 101	fL
MEAN CORPUSCULAR HGB.	34.1	High	27 - 32	pg
MEAN CORPUSCULAR HEMOGLOBIN CONCENTRATION	32.0		31.5 - 34.5	g/dL
PLATELET COUNT	228		150 - 410	thou/ μ L
MEAN PLATELET VOLUME	8.7		6.8 - 10.9	fL
WHITE BLOOD CELL COUNT	5.6		4.0 - 10.0	thou/ μ L
WBC DIFFERENTIAL COUNT				
SEGMENTED NEUTROPHILS	79		40 - 80	%
EOSINOPHILS	03		1 - 6	%
LYMPHOCYTES	14	Low	20 - 40	%
MONOCYTES	04		2 - 10	%
RYTHRO SEDIMENTATION RATE, BLOOD				
SEDIMENTATION RATE (ESR)	28	High	0 - 14	mm at 1 hr

METHOD : WESTERGREN METHOD

Interpretation(s)

COMPLETE BLOOD COUNT-The cell morphology is well preserved for 24hrs. However after 24-48 hrs a progressive increase in MCV and HCT is observed leading to a decrease in MCHC. A direct smear is recommended for an accurate differential count and for examination of RBC morphology.

ERYTHRO SEDIMENTATION RATE, BLOOD- Erythrocyte sedimentation rate (ESR) is a non-specific phenomena and is clinically useful in the diagnosis and monitoring of disorders associated with an increased production of acute phase reactants. The ESR is increased in pregnancy from about the 3rd month and returns to normal by the 4th week post partum. ESR is influenced by age, sex, menstrual cycle and drugs (eg. corticosteroids, contraceptives). It is especially low (0-1mm) in polycythaemia, hypofibrinogenemia or congestive cardiac failure. ESR is also increased when there are abnormalities of the red cells such as poikilocytosis, spherocytosis or sickle cells.

Reference :

Wathan and Oski's Haematology of Infancy and Childhood, 5th edition
 Paediatric reference intervals. AACCC Press, 7th edition. Edited by S. Soldin
 The reference for the adult reference range is "Practical Haematology by Dacie and Lewis, 10th Edition"

BIO CHEMISTRY

LIVER FUNCTION PROFILE, SERUM

TOTAL BILIRUBIN	1.71	High	0.00 - 1.00	mg/dL
METHOD : JENDRASSIK AND GROFF				
DIRECT BILIRUBIN, DIRECT	0.88	High	0.00 - 0.30	mg/dL
METHOD : JENDRASSIK (DIAZO)				
TOTAL PROTEIN	5.6	Low	6.4 - 8.2	g/dL
METHOD : BIURET				
ALBUMIN	3.1	Low	3.4 - 5.0	g/dL
METHOD : BCP				
ALBUMIN	2.5		2.0 - 4.1	G/DL

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DRATORY REPORT



PATIENT NAME : MYKHAILO

PATIENT ID : FH04.299702

CLIENT PATIENT ID : UHID:299702

ACCESSION NO : 01040L005279 **AGE : 32 Years** **SEX : Male** **DATE OF BIRTH :**
DRAWN : 29/12/2015 22:24 **RECEIVED : 29/12/2015 22:15** **REPORTED : 29/12/2015 23:17**

CLIENT NAME : FORTIS MALAR HOSPITAL IPD **REFERRING DOCTOR : DR. BalakrishnanK.R**

CLINICAL INFORMATION :

IPID : IP15-9795- IPD- 4TH FLOOR A BLOCK CITCU

Test Report Status	Final	Results	Biological Reference Interval	Units
METHOD : MANUAL				
ALBUMIN/GLOBULIN RATIO		1.2	1.0 - 2.1	RATIO
ASPARTATE AMINOTRANSFERASE(SGOT)		19	15 - 37	U/L
METHOD : IFCC				
ALANINE AMINOTRANSFERASE (SGPT)		28	< 45.0	U/L
METHOD : IFCC				
ALKALINE PHOSPHATASE		103	30 - 120	U/L
METHOD : ISO ENZYME				
γ-Glutamyl Transferase		82	15 - 85	U/L
METHOD : IFCC				
LACTATE DEHYDROGENASE		225	High 100 - 190	U/L
METHOD : IFCC				
BLOOD UREA NITROGEN, SERUM				
BLOOD UREA NITROGEN		20	6 - 20	mg/dL
METHOD : UREASE - UV				
CREATININE, SERUM				
CREATININE		0.6	Low 0.9 - 1.3	mg/dL
METHOD : NAOH				

Interpretation(s)

LIVER FUNCTION PROFILE, SERUM-

BILIRUBIN PROFILE
 Bilirubin is a yellowish pigment found in bile and is a breakdown product of normal heme catabolism. Bilirubin is excreted in bile and urine, and elevated levels may give yellow discoloration in jaundice. Elevated levels result from increased bilirubin production (eg, hemolysis and ineffective erythropoiesis), decreased bilirubin excretion (eg, obstruction and hepatitis), and abnormal bilirubin metabolism (eg, hereditary and neonatal jaundice). Conjugated (direct) bilirubin is elevated more than unconjugated (indirect) bilirubin in Viral hepatitis, Drug reactions, Alcoholic liver disease. Conjugated (direct) bilirubin is also elevated more than unconjugated (indirect) bilirubin when there is some kind of blockage of the bile ducts like in Gallstones getting into the bile ducts, tumors & Scarring of the bile ducts. Increased unconjugated (indirect) bilirubin may be a result of Hemolytic or pernicious anemia, Transfusion reaction & a common metabolic condition termed Gilbert syndrome, due to low levels of the enzyme that attaches sugar molecules to bilirubin.
 AST is an enzyme found in various parts of the body. AST is found in the liver, heart, skeletal muscle, kidneys, brain, and red blood cells, and it is commonly measured initially as a marker for liver health. AST levels increase during chronic viral hepatitis, blockage of the bile duct, cirrhosis of the liver, liver cancer, kidney failure, hemolytic anemia, pancreatitis, hemochromatosis. AST levels may also increase after a heart attack or strenuous activity. ALT test measures the amount of this enzyme in the blood. ALT is found mainly in the liver, but also in smaller amounts in the kidneys, heart, muscles, and pancreas. It is commonly measured as a part of a diagnostic evaluation of hepatocellular injury, to determine liver health. AST levels increase during acute hepatitis, sometimes due to a viral infection, ischemia to the liver, chronic hepatitis, obstruction of bile ducts, cirrhosis.
 ALP is a protein found in almost all body tissues. Tissues with higher amounts of ALP include the liver, bile ducts and bone. Elevated ALP levels are seen in Biliary obstruction, osteoblastic bone tumors, osteomalacia, hepatitis, Hyperparathyroidism, Leukemia, Lymphoma, Paget's disease, Rickets, Sarcoidosis etc. Lower-than-normal ALP levels seen in Hypophosphatasia, Malnutrition, Protein deficiency, Wilson's disease. GGT is an enzyme found in cell membranes of many tissues mainly in the liver, kidney and pancreas. It is also found in other tissues including intestine, spleen, heart, brain and seminal vesicles. The highest concentration is in the kidney, but the liver is considered the source of normal enzyme activity. Serum GGT has been widely used as an index of liver dysfunction. Elevated serum GGT activity can be found in diseases of the liver, biliary system and pancreas. Conditions that increase serum GGT are obstructive liver disease, high alcohol consumption and use of enzyme-inducing drugs etc. Serum total protein, also known as total protein, is a biochemical test for measuring the total amount of protein in serum. Protein in the plasma is made up of albumin and globulin. Higher-than-normal levels may be due to: Chronic inflammation or infection, including HIV and hepatitis B or C, Multiple myeloma, Waldenstrom's disease. Lower-than-normal levels may be due to: Human gammaglobulinemia, Bleeding (hemorrhage), Burns, Glomerulonephritis, Liver disease, Malabsorption, Malnutrition, Nephrotic syndrome, Protein-losing enteropathy etc. Human serum albumin is the most abundant protein in human blood plasma. It is produced in the liver. Albumin constitutes about half of the blood serum protein. Low blood albumin levels (hypoalbuminemia) can be caused by: Liver disease like cirrhosis of the liver, nephrotic syndrome, protein-losing enteropathy, Burns, hemodilution, increased vascular permeability or decreased lymphatic clearance, malnutrition and wasting etc.

BLOOD UREA NITROGEN, SERUM-Causes of Increased levels

renal
 High protein diet, Increased protein catabolism, GI haemorrhage, Cortisol, Dehydration, CHF Renal
 Renal Failure
 Acute Renal
 Malignancy, Nephrolithiasis, Prostatism

Causes of decreased levels

Liver disease
 SIADH.
CREATININE, SERUM-

Higher than normal level may be due to:
 Blockage in the urinary tract
 Kidney problems, such as kidney damage or failure, infection, or reduced blood flow
 Loss of body fluid (dehydration)
 Muscle problems, such as breakdown of muscle fibers

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RATORY REPORT

PATIENT NAME : MYKHAILO



PATIENT ID : FH04.299702

CLIENT PATIENT ID : UHID:299702

ACCESSION NO : 01040L005279

AGE : 32 Years

SEX : Male

DATE OF BIRTH :

RAWN : 29/12/2015 22:24

RECEIVED : 29/12/2015 22:15

REPORTED : 29/12/2015 23:17

PATIENT NAME : FORTIS MALAR HOSPITAL IPD

REFERRING DOCTOR : DR. Balakrishnak.R

CLINICAL INFORMATION :

PID : IP15-9795- IPD- 4TH FLOOR A BLOCK CITCU

Test Report Status

Final

Results

Biological Reference Interval

Units

Problems during pregnancy, such as seizures (eclampsia)), or high blood pressure caused by pregnancy (preeclampsia)

Lower than normal level may be due to:

Myasthenia Gravis
Muscular dystrophy

****End Of Report****

Please visit www.srlworld.com for related Test Information for this accession

Dr.Selva Kumaran,M.D.

LORATORY REPORT

PATIENT NAME : MYKHAILO



PATIENT ID : FH04.299702

CLIENT PATIENT ID : UHID:299702

ACCESSION NO : 01040L005279

AGE : 32 Years SEX : Male

DATE OF BIRTH :

DRAWN : 29/12/2015 22:24

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REPORTED : 29/12/2015 23:17

CLIENT NAME : FORTIS MALAR HOSPITAL IPD

REFERRING DOCTOR : DR. BalakrishnanK.R

CLINICAL INFORMATION :

PID :IP15-9795- IPD- 4TH FLOOR A BLOCK CITCU

Test Report Status	Final	Results	Biological Reference Interval	Units
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HAEMATOLOGY

CBC WITH ESR (CBC+PS+ESR) EDTA WHOLE BLOOD/SMEAR

COMPLETE BLOOD COUNT

RED BLOOD CELL COUNT	3.14	Low	4.5 - 5.5	mil/ μ L
HEMOGLOBIN	10.7	Low	13.0 - 17.0	g/dL
HEMATOCRIT	33.4	Low	40 - 50	%
MEAN CORPUSCULAR VOL	106.4	High	83 - 101	fL
MEAN CORPUSCULAR HGB.	34.1	High	27 - 32	pg
MEAN CORPUSCULAR HEMOGLOBIN CONCENTRATION	32.0		31.5 - 34.5	g/dL
PLATELET COUNT	228		150 - 410	thou/ μ L
MEAN PLATELET VOLUME	8.7		6.8 - 10.9	fL
WHITE BLOOD CELL COUNT	5.6		4.0 - 10.0	thou/ μ L

WBC DIFFERENTIAL COUNT

SEGMENTED NEUTROPHILS	79		40 - 80	%
EOSINOPHILS	03		1 - 6	%
LYMPHOCYTES	14	Low	20 - 40	%
MONOCYTES	04		2 - 10	%

RYTHRO SEDIMENTATION RATE, BLOOD

SEDIMENTATION RATE (ESR)	28	High	0 - 14	mm at 1 hr
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METHOD : WESTERGREN METHOD

Interpretation(s)

COMPLETE BLOOD COUNT-The cell morphology is well preserved for 24hrs. However after 24-48 hrs a progressive increase in MCV and HCT is observed leading to a decrease in MCHC. A direct smear is recommended for an accurate differential count and for examination of RBC morphology.

RYTHRO SEDIMENTATION RATE, BLOOD-

rythrocyte sedimentation rate (ESR) is a non - specific phenomena and is clinically useful in the diagnosis and monitoring of disorders associated with an increased production of acute phase reactants. The ESR is increased in pregnancy from about the 3rd month and returns to normal by the 4th week post partum. ESR is influenced by age, sex, menstrual cycle and drugs (eg. corticosteroids, contraceptives). It is especially low (0 -1mm) in polycythaemia, hypofibrinogenemia or congestive cardiac failure and when there are abnormalities of the red cells such as poikilocytosis, spherocytosis or sickle cells.

Reference :

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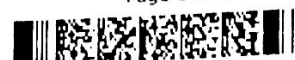
BIO CHEMISTRY

LIVER FUNCTION PROFILE, SERUM

TOTAL BILIRUBIN	1.71	High	0.00 - 1.00	mg/dL
METHOD : JENDRASSIK AND GROFF				
BILIRUBIN, DIRECT	0.88	High	0.00 - 0.30	mg/dL
METHOD : JENDRASSIK (DIAZO)				
TOTAL PROTEIN	5.6	Low	6.4 - 8.2	g/dL
METHOD : BIURET				
ALBUMIN	3.1	Low	3.4 - 5.0	g/dL
METHOD : BCP				
ALBULIN	2.5		2.0 - 4.1	G/DL

Page 1 Of 3

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PATIENT NAME : MYKHAILO

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ACCESSION NO : 01040L005279

AGE : 32 Years

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REFERRING DOCTOR : DR. BalakrishnanK.R

CLINICAL INFORMATION :

IPID : IP15-9795- IPD- 4TH FLOOR A BLOCK CITCU

Test Report Status	Final	Results	Biological Reference Interval	Units
METHOD : MANUAL				
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METHOD : IFCC				
ALANINE AMINOTRANSFERASE (SGPT)		28	< 45.0	U/L
METHOD : IFCC				
ALKALINE PHOSPHATASE		103	30 - 120	U/L
METHOD : ISO ENZYME				
G-GLUTAMYL TRANSFERASE		82	15 - 85	U/L
METHOD : IFCC				
LACTATE DEHYDROGENASE		225	High 100 - 190	U/L
METHOD : IFCC				
BLOOD UREA NITROGEN, SERUM				
BLOOD UREA NITROGEN		20	6 - 20	mg/dL
METHOD : UREASE - UV				
CREATININE, SERUM				
CREATININE		0.6	Low 0.9 - 1.3	mg/dL
METHOD : NAOH				

Interpretation(s)

LIVER FUNCTION PROFILE, SERUM- LIVER FUNCTION PROFILE

Bilirubin is a yellowish pigment found in bile and is a breakdown product of normal heme catabolism. Bilirubin is excreted in bile and urine, and elevated levels may give yellow discoloration in jaundice. Elevated levels result from increased bilirubin production (eg. hemolysis and ineffective erythropoiesis), decreased bilirubin excretion (eg. obstruction and hepatitis), and abnormal bilirubin metabolism (eg. hereditary and neonatal jaundice). Conjugated (direct) bilirubin is elevated more than unconjugated (indirect) bilirubin in Viral hepatitis. Drug reactions, Alcoholic liver disease Conjugated (direct) bilirubin is also elevated more than unconjugated (indirect) bilirubin when there is some kind of blockage of the bile ducts like in Gallstones getting into the bile ducts, tumors & Scarring of the bile ducts. Increased unconjugated (indirect) bilirubin may be a result of Hemolytic or pernicious anemia, Transfusion reaction & a common metabolic condition termed Gilbert syndrome, due to low levels of the enzyme that attaches sugar molecules to bilirubin.

AST is an enzyme found in various parts of the body. AST is found in the liver, heart, skeletal muscle, kidneys, brain, and red blood cells, and it is commonly measured clinically as a marker for liver health. AST levels increase during chronic viral hepatitis, blockage of the bile duct, cirrhosis of the liver, liver cancer, kidney failure, hemolytic anemia, pancreatitis, hemochromatosis. AST levels may also increase after a heart attack or strenuous activity. ALT test measures the amount of this enzyme in the blood. ALT is found mainly in the liver, but also in smaller amounts in the kidneys, heart, muscles, and pancreas. It is commonly measured as a part of a diagnostic evaluation of hepatocellular injury, to determine liver health. AST levels increase during acute hepatitis, sometimes due to a viral infection, ischemia to the liver, chronic hepatitis, obstruction of bile ducts, cirrhosis.

ALP is a protein found in almost all body tissues. Tissues with higher amounts of ALP include the liver, bile ducts and bone. Elevated ALP levels are seen in Biliary obstruction, Osteoblastic bone tumors, osteomalacia, hepatitis, Hyperparathyroidism, Leukemia, Lymphoma, Paget's disease, Rickets, Sarcoidosis etc. Lower-than-normal ALP levels are seen in Hypophosphatasia, Malnutrition, Protein deficiency, Wilson's disease. GGT is an enzyme found in cell membranes of many tissues mainly in the liver, kidney and pancreas. Also found in other tissues including intestine, spleen, heart, brain and seminal vesicles. The highest concentration is in the kidney, but the liver is considered the source of normal enzyme activity. Serum GGT has been widely used as an index of liver dysfunction. Elevated serum GGT activity can be found in diseases of the liver, biliary system, pancreas. Conditions that increase serum GGT are obstructive liver disease, high alcohol consumption and use of enzyme-inducing drugs etc. Serum total protein, also known as total protein, is a biochemical test for measuring the total amount of protein in serum. Protein in the plasma is made up of albumin and globulin. Higher-than-normal levels are due to: Chronic inflammation or infection, including HIV and hepatitis B or C, Multiple myeloma, Waldenstrom's disease. Lower-than-normal levels may be due to:

Agammaglobulinemia, Bleeding (hemorrhage), Burns, Glomerulonephritis, Liver disease, Malabsorption, Malnutrition, Nephrotic syndrome, Protein-losing enteropathy etc. Low serum albumin is the most abundant protein in human blood plasma. It is produced in the liver. Albumin constitutes about half of the blood serum protein. Low blood albumin levels (hypoalbuminemia) can be caused by: Liver disease like cirrhosis of the liver, nephrotic syndrome, protein-losing enteropathy, Burns, hemodilution, increased vascular permeability or decreased lymphatic clearance, malnutrition and wasting etc.

BLOOD UREA NITROGEN, SERUM- Causes of Increased levels

Pre renal

- High protein diet, Increased protein catabolism, GI haemorrhage, Cortisol, Dehydration, CHF Renal
- Renal Failure

Post Renal

- Malignancy, Nephrolithiasis, Prostatism

Causes of decreased levels

- Liver disease
- SIADH

CREATININE, SERUM-

Higher than normal level may be due to:

- Blockage in the urinary tract
- Kidney problems, such as kidney damage or failure, infection, or reduced blood flow
- Loss of body fluid (dehydration)
- Muscle problems, such as breakdown of muscle fibers

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CIN - U74899DL1995PLC070603



LABORATORY REPORT

PATIENT NAME : MYKHAILO



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Diagnostics
Trusted by millions

PATIENT ID : FH04.299702

CLIENT PATIENT ID : UHID:299702

ACCESSION NO : 01040L005279

AGE : 32 Years

SEX : Male

DATE OF BIRTH :

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REFERRING DOCTOR : DR. Balakrishnank.R

CLINICAL INFORMATION :

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Test Report Status

Final

Results

Biological Reference Interval

Units

- Problems during pregnancy, such as seizures (eclampsia)), or high blood pressure caused by pregnancy (preeclampsia)
- Lower than normal level may be due to:
 - Myasthenia Gravis
 - Muscular dystrophy

****End Of Report****

Please visit www.srlworld.com for related Test Information for this accession

Dr.Selva Kumaran,M.D.

Bathalariet

PATIENT NAME : MYKHAILO

PATIENT ID : FH04.299702

CLIENT PATIENT ID : UHID:299702

ACCESSION NO : 01040L005279 AGE : 32 Years SEX : Male DATE OF BIRTH :

DRAWN : 29/12/2015 22:24

RECEIVED : 29/12/2015 22:15

REPORTED : 29/12/2015 23:17

CLIENT NAME : FORTIS MALAR HOSPITAL IPD

REFERRING DOCTOR : DR. BalakrishnanK.R

CLINICAL INFORMATION :

IPID :IP15-9795- IPD- 4TH FLOOR A BLOCK CITCU

Test Report Status	Final	Results	Biological Reference Interval	Units
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HAEMATOLOGY

CBC WITH ESR (CBC+PS+ESR) EDTA WHOLE BLOOD/SMEAR**COMPLETE BLOOD COUNT**

RED BLOOD CELL COUNT	3.14	Low 4.5 - 5.5	mil/ μ L
HEMOGLOBIN	10.7	Low 13.0 - 17.0	g/dL
HEMATOCRIT	33.4	Low 40 - 50	%
MEAN CORPUSCULAR VOL	106.4	High 83 - 101	fL
MEAN CORPUSCULAR HGB.	34.1	High 27 - 32	pg
MEAN CORPUSCULAR HEMOGLOBIN CONCENTRATION	32.0	31.5 - 34.5	g/dL
PLATELET COUNT	228	150 - 410	thou/ μ L
MEAN PLATELET VOLUME	8.7	6.8 - 10.9	fL
WHITE BLOOD CELL COUNT	5.6	4.0 - 10.0	thou/ μ L

WBC DIFFERENTIAL COUNT

SEGMENTED NEUTROPHILS	79	40 - 80	%
EOSINOPHILS	03	1 - 6	%
LYMPHOCYTES	14	Low 20 - 40	%
MONOCYTES	04	2 - 10	%

ERYTHRO SEDIMENTATION RATE, BLOOD

SEDIMENTATION RATE (ESR)	28	High 0 - 14	mm at 1 hr
--------------------------	----	-------------	------------

METHOD : WESTERGREN METHOD

Test Method(s)

COMPLETE BLOOD COUNT-The cell morphology is well preserved for 24hrs. However after 24-48 hrs a progressive increase in MCV and HCT is observed leading to a decrease in MCHC. A direct smear is recommended for an accurate differential count and for examination of RBC morphology.

ERYTHRO SEDIMENTATION RATE, BLOOD-

Erythrocyte sedimentation rate (ESR) is a non-specific phenomenon and is clinically useful in the diagnosis and monitoring of disorders associated with an increased production of acute phase reactants. The ESR is increased in pregnancy from about the 3rd month and returns to normal by the 4th week post partum. ESR is influenced by age, sex, menstrual cycle and drugs (eg. corticosteroids, contraceptives). It is especially low (0-1mm) in polycythaemia, hypofibrinogenemia or congestive cardiac failure and when there are abnormalities of the red cells such as poikilocytosis, spherocytosis or sickle cells.

Reference :

- Nathan and Oski's Haematology of Infancy and Childhood, 5th edition
- Paediatric reference Intervals. AACCPress, 7th edition. Edited by S. Soldin
- The reference for the adult reference range is "Practical Haematology by Dacie and Lewis, 10th Edition"

BIO CHEMISTRY

LIVER FUNCTION PROFILE, SERUM

TOTAL BILIRUBIN	1.71	High 0.00 - 1.00	mg/dL
METHOD : JENDRASSIK AND GROFF			
BILIRUBIN, DIRECT	0.88	High 0.00 - 0.30	mg/dL
METHOD : JENDRASSIK (DIAZO)			
TOTAL PROTEIN	5.6	Low 6.4 - 8.2	g/dL
METHOD : BIURET			
ALBUMIN	3.1	Low 3.4 - 5.0	g/dL
METHOD : BCP			
GLOBULIN	2.5	2.0 - 4.1	G/DL

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CHENNAI, 600020
TAMIL NADU, INDIA
Tel : 044-42054810, Fax :
CIN - U74899DL1995PLC070603



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IPID : IP15-9795- IPD- 4TH FLOOR A BLOCK CITCU

Test Report Status	Final	Results	Biological Reference Interval	Units
METHOD : MANUAL				
ALBUMIN/GLOBULIN RATIO		1.2	1.0 - 2.1	RATIO
ASPARTATE AMINOTRANSFERASE(SGOT)		19	15 - 37	U/L
METHOD : IFCC				
ALANINE AMINOTRANSFERASE (SGPT)		28	< 45.0	U/L
METHOD : IFCC				
ALKALINE PHOSPHATASE		103	30 - 120	U/L
METHOD : ISO ENZYME				
G-GLUTAMYL TRANSFERASE		82	15 - 85	U/L
METHOD : IFCC				
LACTATE DEHYDROGENASE		225	High 100 - 190	U/L
METHOD : IFCC				
BLOOD UREA NITROGEN, SERUM				
BLOOD UREA NITROGEN		20	6 - 20	mg/dL
METHOD : UREASE - UV				
CREATININE, SERUM				
CREATININE		0.6	Low 0.9 - 1.3	mg/dL
METHOD : NAOM				

Test Method(s)

**LIVER FUNCTION PROFILE, SERUM-
LIVER FUNCTION PROFILE**

Bilirubin is a yellowish pigment found in bile and is a breakdown product of normal heme catabolism. Bilirubin is excreted in bile and urine, and elevated levels may give yellow discoloration in jaundice. Elevated levels result from increased bilirubin production (eg, hemolysis and ineffective erythropoiesis), decreased bilirubin excretion (eg, obstruction and hepatitis), and abnormal bilirubin metabolism (eg, hereditary and neonatal jaundice). Conjugated (direct) bilirubin is elevated more than unconjugated (indirect) bilirubin in viral hepatitis, drug reactions, alcoholic liver disease. Conjugated (direct) bilirubin is also elevated more than unconjugated (indirect) bilirubin when there is some kind of blockage of the bile ducts like in Gallstones getting into the bile ducts, tumors & Scarring of the bile ducts. Increased unconjugated (indirect) bilirubin may be a result of hemolytic or pernicious anemia, Transfusion reaction & a common metabolic condition termed Gilbert syndrome, due to low levels of the enzyme that attaches sugar molecules to bilirubin.

AST is an enzyme found in various parts of the body. AST is found in the liver, heart, skeletal muscle, kidneys, brain, and red blood cells, and it is commonly measured clinically as a marker for liver health. AST levels increase during chronic viral hepatitis, blockage of the bile duct, cirrhosis of the liver, liver cancer, kidney failure, hemolytic anemia, pancreatitis, hemochromatosis. AST levels may also increase after a heart attack or strenuous activity. ALT test measures the amount of this enzyme in the blood. ALT is found mainly in the liver, but also in smaller amounts in the kidneys, heart, muscles, and pancreas. It is commonly measured as a part of a diagnostic evaluation of hepatocellular injury, to determine liver health. AST levels increase during acute hepatitis, sometimes due to a viral infection, ischemia to the liver, chronic hepatitis, obstruction of bile ducts, cirrhosis.

ALP is a protein found in almost all body tissues. Tissues with higher amounts of ALP include the liver, bile ducts and bone. Elevated ALP levels are seen in Biliary obstruction, Osteoblastic bone tumors, osteomalacia, hepatitis, Hyperparathyroidism, Leukemia, Lymphoma, Paget's disease, Rickets, Sarcoidosis etc. Lower-than-normal ALP levels seen in Hypophosphatemia, Malnutrition, Protein deficiency, Wilson's disease. GGT is an enzyme found in cell membranes of many tissues mainly in the liver, kidney and pancreas. It is also found in other tissues including intestine, spleen, heart, brain and seminal vesicles. The highest concentration is in the kidney but the liver is considered the source of normal enzyme activity. Serum GGT has been widely used as an index of liver dysfunction. Elevated serum GGT activity can be found in diseases of the liver, biliary system and pancreas. Conditions that increase serum GGT are obstructive liver disease, high alcohol consumption and use of enzyme-inducing drugs etc. Serum total protein also known as total protein, is a biochemical test for measuring the total amount of protein in serum. Protein in the plasma is made up of albumin and globulin. Higher-than-normal levels may be due to: Chronic inflammation or infection, including HIV and hepatitis B or C, Multiple myeloma, Waldenstrom's disease. Lower-than-normal levels may be due to:

Agammaglobulinemia, Bleeding (hemorrhage), Burns, Glomerulonephritis, Liver disease, Malabsorption, Malnutrition, Nephrotic syndrome, Protein-losing enteropathy etc. Human serum albumin is the most abundant protein in human blood plasma. It is produced in the liver. Albumin constitutes about half of the blood serum protein. Low blood albumin levels (hypoalbuminemia) can be caused by: Liver disease like cirrhosis of the liver, nephrotic syndrome, protein-losing enteropathy, Burns, hemodialysis, increased vascular permeability or decreased lymphatic clearance, malnutrition and wasting etc.

BLOOD UREA NITROGEN, SERUM- Causes of Increased levels

Pre renal

- High protein diet, Increased protein catabolism, GI haemorrhage, Cortisol, Dehydration, CHF Renal
- Renal Failure

Post Renal

- Malignancy, Nephrolithiasis, Prostatism

Causes of decreased levels

- Liver disease
- SIADH.

CREATININE, SERUM-

Higher than normal level may be due to:

- Blockage in the urinary tract
- Kidney problems, such as kidney damage or failure, infection, or reduced blood flow
- Loss of body fluid (dehydration)
- Muscle problems, such as breakdown of muscle fibers

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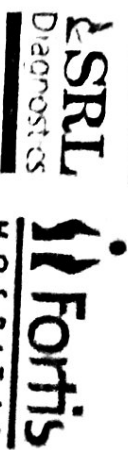
CHENNAI, 600020

TAMIL NADU, INDIA

Tel : 044-42054810, Fax :

CIN - U74899DL1995PLC070603





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PATIENT ID : FH04.299702

CLIENT PATIENT ID : UHID:299702

ACCESSION NO : 01040L005279

DRAWN : 29/12/2015 22:24

AGE : 32 Years

SEX : Male

DATE OF BIRTH :

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CLIENT NAME : FORTIS MALAR HOSPITAL IPD

REFERRING DOCTOR : DR. BalakrishnanK.R

CLINICAL INFORMATION :

IPID : IP15-9795- IPD- 4TH FLOOR A BLOCK CTCU

Test Report Status	Final	Results	Biological Reference Interval	Units
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****End Of Report****

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**Dr.Selva Kumaran,M.D.
Pathologist**

LABORATORY REPORT



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PATIENT ID : **FH04.299702**

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Test Report Status	Final	Results	Biological Reference Interval	Un:
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HAEMATOLOGY

CBC WITH ESR (CBC+PS+ESR) EDTA WHOLE BLOOD/SMEAR

COMPLETE BLOOD COUNT

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ERYTHRO SEDIMENTATION RATE, BLOOD

SEDIMENTATION RATE (ESR)	28	High 0 - 14	mm at 1 h
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METHOD : WESTERGREIN METHOD

Interpretation(s)

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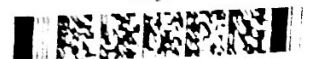
BIO CHEMISTRY

LIVER FUNCTION PROFILE, SERUM

TOTAL BILIRUBIN	1.71	High 0.00 - 1.00	mg/dL
METHOD : JENDRASSIK AND GROFF			
BILIRUBIN, DIRECT	0.88	High 0.00 - 0.30	mg/dL
METHOD : JENDRASSIK (DIAZO)			
TOTAL PROTEIN	5.6	Low 6.4 - 8.2	g/dL
METHOD : BIURET			
ALBUMIN	3.1	Low 3.4 - 5.0	g/dL
METHOD : BCP			
GLOBULIN	2.5	2.0 - 4.1	G/DL

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METHOD : ISO ENZYME				
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BLOOD UREA NITROGEN, SERUM				
BLOOD UREA NITROGEN		20	6 - 20	mg/dL
METHOD : UREASE - UV				
CREATININE, SERUM				
CREATININE		0.6	Low 0.9 - 1.3	mg/dL
METHOD : NAOH				

Interpretation(s)

LIVER FUNCTION PROFILE, SERUM- LIVER FUNCTION PROFILE

Bilirubin is a yellowish pigment found in bile and is a breakdown product of normal heme catabolism. Bilirubin is excreted in bile and urine, and elevated levels may give yellow discoloration in jaundice. Elevated levels result from increased bilirubin production (eg, hemolysis and ineffective erythropoiesis), decreased bilirubin excretion (eg, obstruction and hepatitis), and abnormal bilirubin metabolism (eg, hereditary and neonatal jaundice). Conjugated (direct) bilirubin is elevated more than unconjugated (indirect) bilirubin in Viral hepatitis, Drug reactions, Alcoholic liver disease. Conjugated (direct) bilirubin is also elevated more than unconjugated (indirect) bilirubin when there is some kind of blockage of the bile ducts like in Gallstones getting into the bile ducts, tumors & Scarring of the bile ducts. Increased unconjugated (indirect) bilirubin may be a result of Hemolytic or pernicious anemia, Transfusion reaction & a common metabolic condition termed Gilbert syndrome, due to low levels of the enzyme that attaches sugar molecules to bilirubin.

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ALP is a protein found in almost all body tissues. Tissues with higher amounts of ALP include the liver, bile ducts and bone. Elevated ALP levels are seen in Biliary obstruction, Osteoblastic bone tumors, osteomalacia, hepatitis, Hyperparathyroidism, Leukemia, Lymphoma, Paget's disease, Rickets, Sarcoidosis etc. Lower-than-normal ALP levels seen in Hypophosphatasia, Malnutrition, Protein deficiency, Wilson's disease. GGT is an enzyme found in cell membranes of many tissues mainly in the liver, kidney and pancreas. It is also found in other tissues including intestine, spleen, heart, brain and seminal vesicles. The highest concentration is in the kidney, but the liver is considered the source of normal enzyme activity. Serum GGT has been widely used as an index of liver dysfunction. Elevated serum GGT activity can be found in diseases of the liver, biliary system and pancreas. Conditions that increase serum GGT are obstructive liver disease, high alcohol consumption and use of enzyme-inducing drugs etc. Serum total protein, also known as total protein, is a biochemical test for measuring the total amount of protein in serum. Protein in the plasma is made up of albumin and globulin. Higher-than-normal levels may be due to Chronic inflammation or infection, including HIV and hepatitis B or C, Multiple myeloma, Waldenstrom's disease. Lower-than-normal levels may be due to:

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BLOOD UREA NITROGEN, SERUM- Causes of Increased levels

Pre renal

- High protein diet, Increased protein catabolism, GI haemorrhage, Cortisol, Dehydration, CHF Renal
- Renal Failure

Post Renal

- Malignancy, Nephrolithiasis, Prostatism

Causes of decreased levels

- Liver disease
- SIADH.

CREATININE, SERUM-

Higher than normal level may be due to:

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