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## Efficacy of *Fucus vesiculosus* Q & thyroidinum 3x in treatment of hypothyroidism

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### Abstract

Hypothyroidism, a prevalent endocrine disorder characterized by insufficient thyroid hormone production, poses significant challenges in conventional medicine due to varying responses to treatment and long-term management issues. Homeopathy, an alternative medical system, offers a holistic approach to addressing hypothyroidism by considering individualized symptoms, emotional states, and overall health of the patient. This article explores the scope of homeopathic treatment for hypothyroidism, emphasizing the principles of individualization and the use of diluted remedies to stimulate the body's innate healing mechanisms. Through a review of clinical studies, case reports, and theoretical frameworks, we analyse the efficacy, safety, and patient outcomes associated with homeopathic interventions. Additionally, the article discusses the potential synergies between homeopathy and conventional therapies, proposing a complementary approach to optimize patient care and improve quality of life for individuals with hypothyroidism.

**Keywords:** Hypothyroidism, homeopathy, alternative medicine, holistic approach, clinical studies

### Introduction

The thyroid is a small, butterfly-shaped gland located at the base of the neck, just below the Adam's apple. The thyroid gland makes two main hormones thyroxine (T<sub>4</sub>) and triiodothyronine (T<sub>3</sub>). These hormones affect every cell in the body. Hypothyroidism happens when the thyroid gland doesn't make enough hormones. It is a condition characterised by an underactive thyroid gland, presenting a significant health concern affecting millions worldwide. Conventional treatments, typically involving synthetic thyroid hormone replacement therapy, have been the conventional way of managing hypothyroidism for decades. However, emerging trends in complementary and alternative medicine have sparked interest in exploring alternative therapeutic modalities, including homeopathy. In the thyroid disorders found most commonly we encounter the following:

### Hypothyroidism

Hypothyroidism occurs when the thyroid gland is underactive and produces insufficient thyroid hormones. Common causes include Hashimoto's thyroiditis, an autoimmune condition, iodine deficiency, and certain medications. Symptoms of hypothyroidism include fatigue, weight gain, cold intolerance, depression, and slowed heart rate. Diagnosis is typically made through elevated levels of thyroid-stimulating hormone (TSH) and low levels of T<sub>4</sub>. Treatment involves hormone replacement therapy with synthetic thyroxine.

### Hyperthyroidism

Hyperthyroidism is characterised by an overactive thyroid gland that produces excess thyroid hormones. Graves' disease, another autoimmune disorder, is the most common cause. Other causes include thyroid nodules and excessive iodine intake. Symptoms include weight loss, heat intolerance, anxiety, tremors, palpitations, and increased heart rate. Diagnosis involves low TSH levels and elevated T<sub>3</sub> and T<sub>4</sub> levels. Treatments include antithyroid medications, radioactive iodine therapy, and sometimes surgery.

### Goitre

A goitre is an abnormal enlargement of the thyroid gland, which can occur with both hypo- and hyperthyroidism or even in euthyroid (normal functioning) states. It can be caused by iodine deficiency, thyroiditis, and genetic factors.

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Symptoms can include visible swelling in the neck, difficulty swallowing or breathing, and a feeling of tightness in the throat. Treatment depends on the underlying cause and may involve iodine supplementation, medications, or surgery.

### Thyroid nodules

Thyroid nodules are lumps that commonly form within the thyroid gland. While most nodules are benign, a small percentage can be cancerous. Causes include iodine deficiency, genetic predisposition, and chronic inflammation of the thyroid. Symptoms are often absent, but larger nodules can cause visible swelling and compressive symptoms. Diagnosis is often made via ultrasound and fine-needle aspiration biopsy. Treatment varies from observation to surgical removal, depending on the nature of the nodule.

### Thyroid cancer

Thyroid cancer, although relatively uncommon, is a serious condition involving malignant growth within the thyroid gland. The main types include papillary, follicular, medullary, and anaplastic thyroid cancer. Risk factors include radiation exposure, family history, and certain genetic mutations. Symptoms might include a lump in the neck, hoarseness, difficulty swallowing, and swollen lymph nodes. Treatment typically involves surgery, radioactive iodine treatment, and sometimes chemotherapy or radiation therapy.

Thyroid disorders encompass a range of conditions that can significantly impact an individual's health. Accurate diagnosis and appropriate treatment are essential for managing these conditions effectively, involving a combination of clinical evaluation, laboratory tests, and imaging studies. Regular monitoring and follow-up are crucial to ensure optimal thyroid function and overall well-being of the person.

### Role of homoeopathy in thyroid treatment

Homoeopathy, founded on the principle of "like cures like," operates on the belief that substances causing symptoms in healthy individuals can alleviate similar symptoms when diluted to ultra-low concentrations. Despite scepticism surrounding its efficacy, homoeopathy has gained popularity among individuals seeking holistic and personalised approaches to healthcare.

The management of hypothyroidism with homoeopathy is a topic of growing interest and debate within the medical community. Advocates of homoeopathy propose that its

individualised approach, focusing on addressing the underlying imbalances in the body, may offer benefits beyond conventional treatments. It is suggested that homoeopathic remedies, carefully selected based on the patient's unique symptom profile, have the potential to stimulate the body's self-regulatory mechanisms, thereby restoring thyroid function.

This paper aims to provide a comprehensive overview of the current landscape of homoeopathic treatment for hypothyroidism. By examining existing literature, clinical evidence, and theoretical frameworks, we seek to critically evaluate the efficacy, safety, and practical implications of integrating homoeopathy into the management of hypothyroidism. Additionally, we aim to identify gaps in knowledge and outline avenues for future research to enhance our understanding of this alternative therapeutic approach.

### Objective

The aim of the study is to evaluate the usefulness of homoeopathic medicines *Fucus vesiculosus* Q & Thyroidinum 3x in the treatment of hypothyroidism.

### Material and Methods

Total 6 patients of newly diagnosed hypothyroidism including both male and female aged 25 to 55 years were treated on an OPD basis.

Pathological symptoms and physical generals were considered and two drugs *Fucus vesiculosus* Q & Thyroidinum 3x were prescribed to all the patients to see its efficacy in treating hypothyroidism.

### Consents

Appropriate patient consent forms have been signed by the patients. They have given consent for their images and clinical information to be used in the article. The patients understand that their names and initials will not be published and their identity will be concealed as best as is possible.

### Inclusion criteria

Patients of age groups 25-55 yrs. both sexes, and acute cases were included in the study.

### Exclusion criteria

Cases of hypothyroidism with co-morbidities were excluded from the study.

**Table 1:** Representing symptoms and thyroid levels before and after

Sr. No.	Case no	Age/ Gender	TSH level at the starting of treatment/ uIU/mL	Chief complaints/ symptoms/ concomitants	TSH levels after 3 months of treatment/ uIU/mL	TSH levels after 6 months treatment uIU/mL	Results
1.	Case A	34/M	10.30	Dry skin, lethargy	5.11	3.55	No lethargy and skin dryness
2.	Case B	47/F	32.78	Hair fall, dry skin, constipation	3.36	3.05	Very minimum hair fall & regular bowel movements.
3.	Case C	44/F	15.37	Joint pains, thirst for cold water	2.79	4.50	Free from joint pains.
4.	Case D	33/F	27.12	Menstrual irregularities, hair fall	7.42	2.78	Menstruation regular & reduced hair fall.
5.	Case E	38/F	6.79	Dry skin, constipation, weight gain	3.9	4.2	Regular bowels, skin better, weight is under control.
6.	Case F	45/F	9.27	Generalised weakness	3.9	3.06	Regular bowels, skin better, weight is under control.

\*TSH normal range: 3.5 - 5.50 uIU/mL.

**Results**

All the cases were treated with Fucus V. Q & Thyroidinum 3x and the thyroid levels showed considerable improvement

over 3 - 6 months and the general symptoms of the patients were also relieved along with.

**CASE - A**

क. रा. बी. नि. आदर्श अस्पताल, बेलतला, गुवाहाटी - 22  
**E.S.I.C. MODEL HOSPITAL, BELTOLA, GUWAHATI - 22**  
**LABORATORY REPORT (Dept. of pathology)**

FORM - A

Regd. No. 2137 Date 15/01/23  
 Patient Name Bijesh Kr. Bhagat Age 37 Sex M  
 Ins. No. B.P.H.C. Hospt. No. \_\_\_\_\_ Bed No. \_\_\_\_\_ Ward No. \_\_\_\_\_

HAEMATOLOGICAL TEST			BIOCHEMICAL TEST		
TEST	FINDINGS	NORMAL RANGE	TEST	FINDINGS	NORMAL RANGE
ESR	mm AEPH	M: 0 - 10 mm F: 0 - 20 mm	Blood Sugar (Random)	mg/dl	84 - 130 mg/dl
Hemoglobin	g/dl	M: 14.6 - 17.8 g/dl F: 12.1 - 15.9 g/dl	Blood Sugar (Fasting)	mg/dl	84 - 110 mg/dl
Total WBC	/cu mm	4000 - 11000/cu mm	Blood Sugar (PP) (1 1/2 hrs after food)	mg/dl	(upto 140 mg/dl)
Total RBC	million / cu mm	M: 4.5 - 6.1 million / cu mm F: 3.8 - 5.3 million / cu mm	Urea	mg/dl	18 - 33 mg/dl
Platelet Count	LAKH / cu mm	1.5 - 4.5 Lakh / cu mm	Creatinine	mg/dl	0.70 - 1.30 mg/dl (0.6 - 1.1 mg/dl)
BT	Min. Secs	2 - 7 min	Total Cholesterol	mg/dl	0 - 200 mg/dl
CT	Min. Secs	5 - 10 min	Triglyceride	mg/dl	40 - 160 mg/dl
ABC	/cu mm	40 - 440 / cu mm	HDL Cholesterol	mg/dl	33 - 79.5 mg/dl
PBT FOR MF			LDL Cholesterol	mg/dl	<130 mg/dl
			VLDL Cholesterol	mg/dl	1 - 32 mg/dl
			Uric Acid	mg/dl	3.3 - 7.0 mg/dl (2.4 - 5.7 mg/dl)
			SGOT (AST)	I.U/L	0 - 35.0 I.U/L
			SGPT (ALT)	I.U/L	0 - 45.0 I.U/L
			Alkaline Phosphatase	I.U/L	ADULT: 45 - 128 I.U/L CHILD: 310 - 810 I.U/L
			GGT	I.U/L	0 - 55 I.U/L
			Total Bilirubin	mg/dl	1.0 - 2.0 mg/dl
			Direct Bilirubin	mg/dl	0 - 0.2 mg/dl
			Indirect Bilirubin	mg/dl	0.2 - 0.8 mg/dl
			Total Protein	g/dl	6.4 - 8.3 g/dl
			Albumin	g/dl	3.5 - 5.2 g/dl
			Globulin	g/dl	2.9 - 3.1 g/dl
			Amylase	I.U/L	21 - 80 I.U/L
			Lipase	I.U/L	0 - 80.0 I.U/L
			Sodium (Na)	m mol/L	135 - 145 m mol/L
			Potassium (K)	m mol/L	3.5 - 5.3 m mol/L
			Chloride (Cl)	m mol/L	98 - 107 m mol/L
			Ca <sup>2+</sup>	mg/dl	8.6 - 10.2 mg/dl
			P Time (T)	sec	
			P Time (C)	sec	
			INR		
			ASO		
			B <sub>2</sub>	ng/ml	0.6 - 1.81 ng/ml
			T <sub>4</sub>	ug/ml	3.01 - 12.45 ug/ml
			T <sub>3</sub>	ug/ml	0.35 - 3.50 ug/ml
			FT <sub>3</sub>	pg/ml	2.3 - 4.3 pg/ml
			FT <sub>4</sub>	ng/dl	3.89 - 1.76 ng/dl
			HbA1c Test	%	Normal < 5.7% Pre Diabetes 5.7 - 6.4% Diabetes > 6.5%
			MONTAUX TEST (5 I.U./10 T.U.)		

**URINE**

HIV 1 & 2 Test \_\_\_\_\_  
 HBs Ag Test \_\_\_\_\_  
 HCV Test \_\_\_\_\_  
 VDRL/TPHA Test \_\_\_\_\_  
 ASO Titre \_\_\_\_\_ (0 - 200 I.U/ml)  
 CRP \_\_\_\_\_ (0 - 6.0 mg/dl)  
 RA factor \_\_\_\_\_ (0 - 20.0 I.U/ml)  
 PF & PV Antigen Test \_\_\_\_\_  
 Typhi Dot Ig M \_\_\_\_\_  
 Dengue Test \_\_\_\_\_  
     NS Ag \_\_\_\_\_  
     Ig M \_\_\_\_\_  
     Ig G \_\_\_\_\_

Widal Test (Tube / Slide Method)

THRE	1:40	1:80	1:160	1:320
HO				
PH				
CAH				
SH				

LAB STUDY

Lab. Technician \_\_\_\_\_ Pathologist \_\_\_\_\_

**ক. বি. এল. এম. এল. গবেষণা, বেলতলা, গুৱাহাটী - ২২**  
**E.S.L.C. MODEL HOSPITAL, BELTOLA, GUWAHATI - 22**  
**LABORATORY REPORT (Dept. of pathology)**

Patient No. **1906** FORM - 1 Date **7/7/23**  
 Patient Name **Rajesh Kumar Bhagat** Age **34** Sex **M.**  
 Reg. No. **6664** Hospital No. \_\_\_\_\_ Bed No. \_\_\_\_\_ Ward No. \_\_\_\_\_

mc

TEST	FINDINGS	NORMAL RANGE
ESR	30 mm/hr	0-10 mm
WBC	12000	4000-11000
Hb	14.0 g/dl	12.0-16.0 g/dl
Hct	42.0 %	37.0-47.0 %
MCV	100 fL	80-100 fL
RDW	13.5 %	11.5-14.5 %
Platelet Count	1.5 lakh /cc	1.5-4.5 lakh /cc
PT	12.5 sec	11-14 sec
APTT	35 sec	25-35 sec
ASAT	0.45 /mg	0.2-0.5 /mg

TEST	FINDINGS	NORMAL RANGE
Glucose	100 mg/dl	70-110 mg/dl
Urea	18 mg/dl	8-20 mg/dl
Creatinine	0.8 mg/dl	0.6-1.2 mg/dl
ALT	45 U/L	0-40 U/L
AST	35 U/L	0-35 U/L
ALP	250 U/L	100-350 U/L
TBL	1.2 mg/dl	0.8-1.5 mg/dl
FTL	0.15 mg/dl	0.1-0.2 mg/dl
TSH	2.5 uIU/ml	0.4-4.0 uIU/ml
T4	10.5 µg/dl	8.0-17.0 µg/dl
T3	0.25 pmol/l	0.2-0.4 pmol/l
T3U	0.015 pmol/l	0.01-0.02 pmol/l
T4U	0.18 pmol/l	0.1-0.2 pmol/l
TSHR	0.015 uIU/ml	0.01-0.02 uIU/ml
T4R	0.18 pmol/l	0.1-0.2 pmol/l
T3R	0.25 pmol/l	0.2-0.4 pmol/l
T3UR	0.015 pmol/l	0.01-0.02 pmol/l
T4UR	0.18 pmol/l	0.1-0.2 pmol/l

TEST	FINDINGS	NORMAL RANGE
Urea	18 mg/dl	8-20 mg/dl
Creatinine	0.8 mg/dl	0.6-1.2 mg/dl
ALT	45 U/L	0-40 U/L
AST	35 U/L	0-35 U/L
ALP	250 U/L	100-350 U/L
TBL	1.2 mg/dl	0.8-1.5 mg/dl
FTL	0.15 mg/dl	0.1-0.2 mg/dl
TSH	2.5 uIU/ml	0.4-4.0 uIU/ml
T4	10.5 µg/dl	8.0-17.0 µg/dl
T3	0.25 pmol/l	0.2-0.4 pmol/l
T3U	0.015 pmol/l	0.01-0.02 pmol/l
T4U	0.18 pmol/l	0.1-0.2 pmol/l
TSHR	0.015 uIU/ml	0.01-0.02 uIU/ml
T4R	0.18 pmol/l	0.1-0.2 pmol/l
T3R	0.25 pmol/l	0.2-0.4 pmol/l
T3UR	0.015 pmol/l	0.01-0.02 pmol/l
T4UR	0.18 pmol/l	0.1-0.2 pmol/l
Urea	18 mg/dl	8-20 mg/dl
Creatinine	0.8 mg/dl	0.6-1.2 mg/dl
ALT	45 U/L	0-40 U/L
AST	35 U/L	0-35 U/L
ALP	250 U/L	100-350 U/L
TBL	1.2 mg/dl	0.8-1.5 mg/dl
FTL	0.15 mg/dl	0.1-0.2 mg/dl
TSH	2.5 uIU/ml	0.4-4.0 uIU/ml
T4	10.5 µg/dl	8.0-17.0 µg/dl
T3	0.25 pmol/l	0.2-0.4 pmol/l
T3U	0.015 pmol/l	0.01-0.02 pmol/l
T4U	0.18 pmol/l	0.1-0.2 pmol/l
TSHR	0.015 uIU/ml	0.01-0.02 uIU/ml
T4R	0.18 pmol/l	0.1-0.2 pmol/l
T3R	0.25 pmol/l	0.2-0.4 pmol/l
T3UR	0.015 pmol/l	0.01-0.02 pmol/l
T4UR	0.18 pmol/l	0.1-0.2 pmol/l

10.30

TEST	FINDINGS	NORMAL RANGE
Urea	18 mg/dl	8-20 mg/dl
Creatinine	0.8 mg/dl	0.6-1.2 mg/dl
ALT	45 U/L	0-40 U/L
AST	35 U/L	0-35 U/L
ALP	250 U/L	100-350 U/L
TBL	1.2 mg/dl	0.8-1.5 mg/dl
FTL	0.15 mg/dl	0.1-0.2 mg/dl
TSH	2.5 uIU/ml	0.4-4.0 uIU/ml
T4	10.5 µg/dl	8.0-17.0 µg/dl
T3	0.25 pmol/l	0.2-0.4 pmol/l
T3U	0.015 pmol/l	0.01-0.02 pmol/l
T4U	0.18 pmol/l	0.1-0.2 pmol/l
TSHR	0.015 uIU/ml	0.01-0.02 uIU/ml
T4R	0.18 pmol/l	0.1-0.2 pmol/l
T3R	0.25 pmol/l	0.2-0.4 pmol/l
T3UR	0.015 pmol/l	0.01-0.02 pmol/l
T4UR	0.18 pmol/l	0.1-0.2 pmol/l

Pathologist

CASE - B

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क. रा. जी. नि. आदर्श अस्पताल, बेलतला, गुवाहाटी - 22  
**E.S.I.C. MODEL HOSPITAL, BELTOLA, GUWAHATI - 22**  
**LABORATORY REPORT (Dept. of pathology)**

Regd. No. 837 FORM - A Date 18/6/23  
 Patient Name Mima Talukder Haloi Age 47 Sex F  
 Ins. No. 7487 Hospt. No. \_\_\_\_\_ Bed No. \_\_\_\_\_ Ward No. \_\_\_\_\_

PTO

TEST	FINDINGS	NORMAL RANGE
ESR	60 mm ABPH	M: 0 - 10 mm F: 0 - 20 mm
Hemoglobin	g/dl	M: 14.6 - 17.8 g/dl F: 12.1 - 15.9 g/dl
Total WBC	/cu mm	4000 - 11000/cu mm
Total RBC	million / cu mm	M: 4.6 - 6.1 million / cu mm F: 3.8 - 5.5 million / cu mm
Platelet Count	Lakh / cu mm	1.5 - 4.5 Lakh / cu mm
BT	.....Min.....Secs	2 - 7 min
CT	.....Min.....Secs	5 - 10 min
ABC	/cu mm	40 - 440 / cu mm
PBS FOR MP		

	%	
Polymorph		40 - 75 %
Lymphocytes		20 - 40 %
Monocytes		2 - 8 %
Eosinophil		1 - 6 %
Basophil		0 - 1 %
PCV	%	M: 42 - 52 % F: 36 - 46 %
MCV	um3	76 - 96 um3
MCH	pg	27 - 32 pg
MCHC	%	30 - 35 %

- SERUM**
- HIV 1 & 2 Test
  - HBs Ag Test
  - HCV Test
  - VDRL/TPHA Test
  - ASO Titre
  - CRP 2.92 0 - 200 IU/ml
  - RA factor 0 - 6.0 mg/dl
  - RF & PV Antigen Test
  - Typhid Dot Ig M
  - Ig G
  - Dengue Test
  - NS Ag
  - Ig M
  - Ig G

Widal Test (Tube / Slide Method)

TIERS	1:20	1:40	1:80	1:160	1:320
"O"					
"H"					
"AH"					
"BH"					

PBS STUDY:

TEST	FINDINGS	NORMAL RANGE
Food Sugar (Random)	95 mg/dl	74 - 150 mg/dl
Blood Sugar (Fasting)	mg/dl	74 - 110 mg/dl
Blood Sugar (PP) (1 1/2 Hrs after food)	mg/dl	Upto 140 mg/dl
Urea	mg/dl	18 - 35 mg/dl
Creatinine	0.9 mg/dl	M: 0.70 - 1.30 mg/dl F: 0.6 - 1.1 mg/dl
Total Cholesterol	198 mg/dl	0 - 200 mg/dl
Triglyceride	124 mg/dl	40 - 160 mg/dl
HDL Cholesterol	51 mg/dl	35.3 - 79.5 mg/dl
LDL Cholesterol	124 mg/dl	<130 mg/dl
VLDL Cholesterol	25 mg/dl	7 - 32 mg/dl
Uric Acid	mg/dl	M: 3.5 - 7.0 mg/dl F: 3.4 - 5.7 mg/dl
ASOT (AST)	27 IU/L	0 - 35.0 IU/L
SGPT (ALT)	23 IU/L	0 - 45.0 IU/L
Alkaline Phosphatase	IU/L	ADULT: 59 - 128 IU/L CHILD: 210 - 210 IU/L
GGT	IU/L	0 - 55 IU/L
Total Bilirubin	0.4 mg/dl	0.0 - 2.0 mg/dl
Direct Bilirubin	mg/dl	0 - 0.2 mg/dl
Indirect Bilirubin	mg/dl	0.2 - 0.8 mg/dl
Total Protein	7.6 g/dl	6.4 - 8.3 g/dl
Albumin	3.9 g/dl	3.5 - 5.2 g/dl
Globulin	3.7 g/dl	1.3 - 3.5 g/dl
Amylase	IU/L	22 - 40 IU/L
Lipase	IU/L	0.0 - 60.0 IU/L
Sodium (Na)	mmol/L	135 - 145 mmol/L
Potassium (K)	mmol/L	3.5 - 5.3 mmol/L
Chloride (Cl)	mmol/L	98 - 107 mmol/L
Ca <sup>2+</sup>	mg/dl	8.6 - 10.2 mg/dl
P. Time (I)	sec	
P. Time (C)	sec	
<b>INR</b>		
AEO		
Rh		
Ts	ng/mL	0.8 - 1.81 ng/mL
T4	ug/mL	5.01 - 12.45 ug/mL
TSH	uIU/mL	0.35 - 5.50 uIU/mL
FT3	pg/mL	2.3 - 4.2 pg/mL
FT4	ng/dl	0.89 - 1.76 ng/dl
HbA1c Test	%	Normal < 5.7% Pre Diabetes 5.7 - 6.4% Diabetes > 6.5%

MONTOUX TEST (S.T.U./10 T.U.)

Lab. Technician

Pathologist

CASE-C

क. रा. बी. नि. आदर्श अस्पताल, बेलतला, गुवाहाटी - 22  
**E.S.I.C. MODEL HOSPITAL, BELTOLA, GUWAHATI - 22**  
**LABORATORY REPORT (Dept. of pathology)**

FORM - A

Regd. No. 5188 Date 6/10/23  
 Patient Name Champa Ghasb Age 44 Sex F  
 Ins. No. 1236 Hospt. No. \_\_\_\_\_ Bed No. \_\_\_\_\_ Ward No. \_\_\_\_\_

TEST	FINDINGS	NORMAL RANGE
ESR	mm AEPH	M: 0 - 10 mm F: 0 - 20 mm
Hemoglobin	g/dl	M: 14.6 - 17.8 g/dl F: 12.1 - 15.9 g/dl
Total WBC	/ cu mm	4000 - 11000/ cu mm
Total RBC	million / cu mm	M: 4.6 - 6.1 million / cu mm F: 3.8 - 5.5 million / cu mm
Platelet Count	Lakh / cu mm	1.5 - 4.5 Lakh / cu mm
BT	Min. Secs	2 - 7 min
CY	Min. Secs	5 - 10 min
ABC	/cu mm	40 - 440 / cu mm
PBS FOR MP		

TEST	FINDINGS	NORMAL RANGE
Polymorph	%	40 - 75 %
Lymphocytes	%	20 - 40 %
Monocytes	%	2 - 8 %
Eosinophil	%	1 - 6 %
Basophil	%	0 - 1 %
PCV	%	M: 42 - 52 % F: 36 - 46 %
MCV	um <sup>3</sup>	76 - 96 um <sup>3</sup>
MCH	pg	27 - 32 pg
MCHC	%	30 - 35 %

- SERIES**
- HIV 1 & 2 Test
  - HBs Ag Test
  - HCV Test
  - VDRL/TPHA Test
  - ASO Titre
  - CRP
  - RA factor
  - PP & PV Antigens Test
  - Typhi Dot: Ig M
  - Dengue Test
  - NS<sub>1</sub> Ag
  - Ig M
  - Ig G

Widal Test (Tube/Slide Method)

TITRE	1:20	1:40	1:80	1:160	1:320
O					
H					
A					
B					

PBS STUDY:

TEST	FINDINGS	NORMAL RANGE
Blood Sugar (Random)	mg/dl	74 - 120 mg/dl
Blood Sugar (Fasting)	mg/dl	74 - 110 mg/dl
Blood Sugar (PP) (1 1/2 Hrs after food)	mg/dl	Upto 140 mg/dl
Urea	mg/dl	18 - 33 mg/dl
Creatinine	mg/dl	M: 0.70 - 1.30 mg/dl F: 0.6 - 1.1 mg/dl
Total Cholesterol	mg/dl	0 - 200 mg/dl
Triglyceride	mg/dl	40 - 160 mg/dl
HDL Cholesterol	mg/dl	35.3 - 79.5 mg/dl
LDL Cholesterol	mg/dl	<130 mg/dl
VLDL Cholesterol	mg/dl	7 - 32 mg/dl
Uric Acid	mg/dl	M: 3.3 - 7.0 mg/dl F: 2.4 - 5.7 mg/dl
SGOT (AST)	I.U./L	0 - 35.0 I.U./L
SGPT (ALT)	I.U./L	0 - 45.0 I.U./L
Alkaline Phosphatase	I.U./L	ADULT: 53 - 128 I.U./L CHILD: 210 - 810 I.U./L
GGT	I.U./L	0 - 55 I.U./L
Total Bilirubin	mg/dl	0.0 - 2.0 mg/dl
Direct Bilirubin	mg/dl	0 - 0.2 mg/dl
Indirect Bilirubin	mg/dl	0.1 - 0.8 mg/dl
Total Protein	g/dl	6.4 - 8.3 g/dl
Albumin	g/dl	3.5 - 5.2 g/dl
Globulin	g/dl	1.5 - 3.5 g/dl
Amylase	I.U./L	72 - 80 I.U./L
Lipase	I.U./L	0.0 - 60.0 I.U./L
Sodium (Na)	mmol/L	133 - 145 mmol/L
Potassium (K)	mmol/L	3.5 - 5.3 mmol/L
Chloride (Cl)	mmol/L	98 - 107 mmol/L
Ca <sup>2+</sup>	mg/dl	8.6 - 10.2 mg/dl
P. Time (T)	sec	
(C)	sec	
INR		
ABO		
Rh		
T3	ng/ml	0.6 - 1.81 ng/ml
T4	ug/ml	5.01 - 12.45 ug/ml
TSH	uIU/ml	0.35 - 5.50 uIU/ml
FT3	pg/ml	2.3 - 4.2 pg/ml
FT4	ng/dl	0.89 - 1.76 ng/dl
HbA1c Test	%	Normal < 5.7% Pre Diabetic 5.7 - 6.4% Diabetic > 6.5%

MONTOUX TEST (5 TU/10 TU)

Lab. Technician

Pathologist

CASE - D



क. रा. बी. नि. आदर्श अस्पताल, बेलतला, गुवाहाटी - 22  
**E.S.I.C. MODEL HOSPITAL, BELTOLA, GUWAHATI - 22**  
**LABORATORY REPORT (Dept. of pathology)**

Regd. No. .... 0890 ..... FORM - A  
 Patient Name mimakshi Das Date 17/4/23  
 Ins. No. 2221 Hospt. No. .... Age 33 Sex F  
 Bed No. .... Ward No. ....

HAEMATOLOGICAL TEST		
TEST	FINDINGS	NORMAL RANGE
ESR	100 mm AEPH	M: 0 - 10 mm F: 0 - 20 mm
Hemoglobin	g/dl	M: 14.6 - 17.8 g/dl F: 12.1 - 15.9 g/dl
Total WBC	/ cu mm	4000 - 11000/ cu mm
Total RBC	million / cu mm	M: 4.6 - 6.1 million / cu mm F: 3.8 - 5.5 million / cu mm
Platelet Count	Lakh / cu mm	1.5 - 4.5 Lakh / cu mm
BT	.....Min.....Secs	2 - 7 min
CT	.....Min.....Secs	5 - 10 min
AEC	/cu mm	40 - 440 / cu mm
PBS FOR MP		

DLC		
Polymorph	%	40 - 75 %
Lymphocytes	%	20 - 40 %
Monocytes	%	2 - 8 %
Eosinophil	%	1 - 6 %
Basophil	%	0 - 1 %
PCV		
	%	M: 42 - 52 % F: 36 - 46 %
MCV	um <sup>3</sup>	76 - 96 um <sup>3</sup>
MCH	pg	27 - 32 pg
MCHC	%	30 - 35 %

- OTHERS**
- HIV 1 & 2 Test
  - HBs Ag Test
  - HCV Test
  - VDRL/TPHA Test
  - ASO Titre
  - CRP
  - RA factor : 24.0 : 0-200 IU/ml
  - PF & PV Antigen Test : : 0-6.0 mg/dl
  - Typhi Dot Ig M : : 0-20.0 IU/ml
  - Typhi Dot Ig G : : : :
  - Dengue Test
  - NS, Ag : : : :
  - Ig M : : : :
  - Ig G : : : :

Widal Test (Tube / Slide Method) :

TITRE	1:20	1:40	1:80	1:160	1:320
"O"					
"H"					
"AH"					
"BT"					

PBS STUDY :

BIO-CHEMICAL TEST		
TEST	FINDINGS	NORMAL RANGE
Blood Sugar (Random)	mg/dl	74 - 150 mg/dl
Blood Sugar (Fasting)	mg/dl	74 - 110 mg/dl
Blood Sugar (PP) (12 Hrs after food)	mg/dl	Upto 140 mg/dl
Urea	mg/dl	18 - 55 mg/dl
Creatinine	mg/dl	M: 0.70 - 1.30 mg/dl F: 0.6 - 1.1 mg/dl
Total Cholesterol	mg/dl	0 - 200 mg/dl
Triglyceride	mg/dl	40 - 160 mg/dl
HDL Cholesterol	mg/dl	35.3 - 79.5 mg/dl
LDL Cholesterol	mg/dl	<130 mg/dl
VLDL Cholesterol	mg/dl	7 - 32 mg/dl
Uric Acid	mg/dl	M: 3.5 - 7.0 mg/dl F: 2.4 - 5.7 mg/dl
SGOT (AST)	IU/L	0 - 35.0 IU/L
SGPT (ALT)	IU/L	0 - 45.0 IU/L
Alkaline Phosphatase	IU/L	ADULT: 53 - 128 IU/L CHILD: 210 - 810 IU/L
GGT	IU/L	0 - 55 IU/L
Total Bilirubin	mg/dl	0.0 - 2.0 mg/dl
Direct Bilirubin	mg/dl	0 - 0.2 mg/dl
Indirect Bilirubin	mg/dl	0.2 - 0.8 mg/dl
Total Protein	g/dl	6.4 - 8.3 g/dl
Albumin	g/dl	3.5 - 5.2 g/dl
Globulin	g/dl	1.5 - 3.5 g/dl
Amylase	IU/L	22 - 80 IU/L
Lipase	IU/L	0.0 - 60.0 IU/L
Sodium (Na)	m mol/L	135 - 145 m mol/L
Potassium (K)	m mol/L	3.5 - 5.3 m mol/L
Chloride (Cl)	m mol/L	98 - 107 m mol/L
Ca <sup>2+</sup>	mg/dl	8.6 - 10.2 mg/dl
P. Time (T)	sec	
(C)	sec	
INR		
ABO		
Rh		
T3	ng/mL	0.6 - 1.81 ng/mL
T4	ug/mL	5.01 - 12.45 ug/mL
TSH	uIU/mL	0.35 - 5.50 uIU/mL
FT3	pg/mL	2.3 - 4.2 pg/mL
FT4	ng/dL	0.89 - 1.76 ng/dL
HbA1c Test	%	Normal <5.7% Pre Diabetes 5.7 - 6.4% Diabetes > 6.5%

MONTOUX TEST (5T.U./10 T.U.)

Lab. Technician

Pathologist



क. रा. बी. नि. आदर्श अस्पताल, बेलतला, गुवाहाटी - 22  
**E.S.I.C. MODEL HOSPITAL, BELTOLA, GUWAHATI - 22**  
**LABORATORY REPORT (Dept. of pathology)**

Regd. No. 7062 FORM - A  
 Patient Name Minakshi Das Date 01/6/23  
 Ins. No. 2221 Age 34 Sex F  
 Hospt. No. \_\_\_\_\_ Bed No. \_\_\_\_\_ Ward No. \_\_\_\_\_

TEST	FINDINGS	NORMAL RANGE
ESR	mm AEFH	M: 0 - 10 mm F: 0 - 20 mm
Hemoglobin	g/dl	M: 14.6 - 17.8 g/dl F: 12.1 - 15.9 g/dl
Total WBC	/cu mm	4000 - 11000/ cu mm
Total RBC	million / cu mm	M: 4.6 - 6.1 million/ cu mm F: 3.8 - 5.5 million/ cu mm
Platelet Count	Lakh / cu mm	1.5 - 4.5 Lakh / cu mm
BT	Min.....Secs	2 - 7 min
CT	Min.....Secs	5 - 10 min
AEC	/cu mm	40 - 440 / cu mm
PBS FOR MP		

**DIFF**

Polymorph	%	40 - 75 %
Lymphocytes	%	20 - 40 %
Monocytes	%	2 - 8 %
Eosinophil	%	1 - 6 %
Basophil	%	0 - 1 %
PCV	%	M: 42 - 52 % F: 36 - 46 %
MCV	um <sup>3</sup>	76 - 96 um <sup>3</sup>
MCH	pg	27 - 32 pg
MCHC	%	30 - 35 %

- HIV 1 & 2 Test
- HBs Ag Test
- HCV Test
- VDRL/TPHA Test
- ASO Titre
- CRP
- RA factor
- PF & PV Antigen Test
- Typhi Dot Ig M
- Typhi Dot Ig G
- Dengue Test
- NS Ag
- Ig M
- Ig G

Widal Test (Tube / Slide Method)

TITRE	1:20	1:40	1:80	1:160	1:320
O					
H					
AH					
DH					

RES STUDY:

TEST	FINDINGS	NORMAL RANGE
Blood Sugar (Random)	mg/dl	74 - 150 mg/dl
Blood Sugar (Fasting)	mg/dl	74 - 110 mg/dl
Blood Sugar (PP) (2 Hrs after food)	mg/dl	Upto 140 mg/dl
Urea	mg/dl	18 - 35 mg/dl
Creatinine	mg/dl	M: 0.70 - 1.30 mg/dl F: 0.6 - 1.1 mg/dl
Total Cholesterol	mg/dl	0 - 200 mg/dl
Triglyceride	mg/dl	40 - 160 mg/dl
HDL Cholesterol	mg/dl	35.3 - 79.5 mg/dl
LDL Cholesterol	mg/dl	<130 mg/dl
VLDL Cholesterol	mg/dl	7 - 32 mg/dl
Uric Acid	mg/dl	M: 3.5 - 7.0 mg/dl F: 2.4 - 5.7 mg/dl
SGOT (AST)	IU/L	0 - 35.0 IU/L
SGPT (ALT)	IU/L	0 - 45.0 IU/L
Alkaline Phosphatase	IU/L	ADULT: 53 - 128 IU/L CHILD: 210 - 510 IU/L
GGT	IU/L	0 - 55 IU/L
Total Bilirubin	mg/dl	0.0 - 2.0 mg/dl
Direct Bilirubin	mg/dl	0 - 0.2 mg/dl
Indirect Bilirubin	mg/dl	0.2 - 0.8 mg/dl
Total Protein	g/dl	6.4 - 8.3 g/dl
Albumin	g/dl	3.5 - 5.2 g/dl
Globulin	g/dl	1.5 - 3.5 g/dl
Amylase	IU/L	22 - 80 IU/L
Lipase	IU/L	0.0 - 60.0 IU/L
Sodium (Na)	mmol/L	135 - 145 mmol/L
Potassium (K)	mmol/L	3.5 - 5.3 mmol/L
Chloride (Cl)	mmol/L	98 - 107 mmol/L
Ca <sup>2+</sup>	mg/dl	8.6 - 10.2 mg/dl
P. Time (T)	sec	
P. Time (C)	sec	
INR		
ABO		
Rh		
A3		
T4	ng/mL	0.6 - 1.81 ng/mL
TSH	uIU/mL	5.01 - 12.45 uIU/mL
FT3	ng/mL	0.35 - 3.50 ng/mL
FT4	ng/dL	2.3 - 4.3 pg/mL
HbA1c Test	%	Normal < 5.7% Pre Diabetes 5.7 - 6.4% Diabetes > 6.5%

MONTOUX TEST (5 TU/10 TU)

Technician

Pathologist



CASE - E



क. रा. बी. नि. आदर्श अस्पताल, बेलतला, गुवाहाटी - 22  
**E.S.I.C. MODEL HOSPITAL, BELTOLA, GUWAHATI - 22**  
**LABORATORY REPORT (Dept. of pathology)**

Regd. No. 5922 FORM - A Date 3/8/23  
 Patient Name Binita Talukdar Age 38 Sex F  
 Ina. No. 8712 Hospt. No. \_\_\_\_\_ Bed No. \_\_\_\_\_ Ward No. \_\_\_\_\_

HAEMATOLOGICAL TEST		
TEST	FINDINGS	NORMAL RANGE
ESR	mm AEPH	M: 0 - 10 mm F: 0 - 20 mm
Hemoglobin	g/dl	M: 14.6 - 17.8 g/dl F: 12.1 - 15.9 g/dl
Total WBC	/ cu mm	4000 - 11000/ cu mm
Total RBC	million / cu mm	M: 4.6 - 6.1 million / cu mm F: 3.8 - 5.5 million / cu mm
Platelet Count	Lakh / cu mm	1.5 - 4.5 Lakh / cu mm
BT	Min. Secs	2 - 7 min
CT	Min. Secs	5 - 10 min
AEC	/cu mm	40 - 440 / cu mm
PBS FOR MP		

CBC		
TEST	FINDINGS	NORMAL RANGE
Polymorph	%	40 - 75 %
Lymphocytes	%	20 - 40 %
Monocytes	%	2 - 8 %
Eosinophil	%	1 - 6 %
Basophil	%	0 - 1 %
PCV	%	M: 42 - 52 % F: 36 - 46 %
MCV	um <sup>3</sup>	76 - 96 um <sup>3</sup>
MCH	pg	27 - 32 pg
MCHC	%	30 - 35 %

- ODTS**
- HIV 1 & 2 Test
  - HBs Ag Test
  - HCV Test
  - VDRL/TPHA Test
  - ASO Titre : 0 - 200 IU/ml
  - CRP : 0 - 6.0 mg/dl
  - RA factor : 0 - 20.0 IU/ml
  - PF & PV Antigen Test
  - Typhi Dot: Ig M
  - Dengue Test
    - NS Ag
    - Ig M
    - Ig G

Widal Test (Tube / Slide Method)

TITRE	1:20	1:40	1:80	1:160	1:320
"O"					
"H"					
"AH"					
"BH"					

BIO-CHEMICAL TEST		
TEST	FINDINGS	NORMAL RANGE
Blood Sugar (Random)	mg/dl	74 - 150 mg/dl
Blood Sugar (Fasting)	mg/dl	74 - 110 mg/dl
Blood Sugar (PP) (1 1/2 Hrs after food)	mg/dl	Upto 140 mg/dl
Urea	mg/dl	18 - 55 mg/dl
Creatinine	mg/dl	M: 0.70 - 1.30 mg/dl F: 0.6 - 1.1 mg/dl
Total Cholesterol	mg/dl	0 - 200 mg/dl
Triglyceride	mg/dl	40 - 160 mg/dl
HDL Cholesterol	mg/dl	35.3 - 79.5 mg/dl
LDL Cholesterol	mg/dl	<130 mg/dl
VLDL Cholesterol	mg/dl	7 - 32 mg/dl
Uric Acid	mg/dl	M: 3.5 - 7.0 mg/dl F: 2.4 - 5.7 mg/dl
SGOT (AST)	IU/L	0 - 35.0 IU/L
SGPT (ALT)	IU/L	0 - 45.0 IU/L
Alkaline Phosphatase	IU/L	ADULT: 53 - 128 IU/L CHILD: 210 - 810 IU/L
GGT	IU/L	0 - 55 IU/L
Total Bilirubin	mg/dl	0.0 - 2.0 mg/dl
Direct Bilirubin	mg/dl	0 - 0.2 mg/dl
Indirect Bilirubin	mg/dl	0.2 - 0.8 mg/dl
Total Protein	g/dl	6.4 - 8.3 g/dl
Albumin	g/dl	3.5 - 5.2 g/dl
Globulin	g/dl	1.5 - 3.5 g/dl
Amylase	IU/L	22 - 80 IU/L
Lipase	IU/L	0.0 - 60.0 IU/L
Sodium (Na)	mmol/L	135 - 145 mmol/L
Potassium (K)	mmol/L	3.5 - 5.3 mmol/L
Chloride (Cl)	mmol/L	98 - 107 mmol/L
Ca <sup>2+</sup>	mg/dl	8.6 - 10.2 mg/dl
P. Time (T)	sec	
(C)	sec	
INR		
ABO		
Rh		
T3	ng/mL	0.6 - 1.81 ng/mL
T4	ug/mL	5.01 - 12.45 ug/mL
TSH	uIU/ml	0.35 - 5.50 uIU/ml
FT3	pg/mL	2.3 - 4.2 pg/mL
FT4	ng/dL	0.89 - 1.76 ng/dL
HbA1c Test	%	Normal <5.7% Pre Diabetes 5.7 - 6.4% Diabetes > 6.5%

MONTOUX TEST (5 T.U./10 T.U.)

\* Ferritin - 600 P-70

PBS STUDY:

Lab. Technician

Pathologist

**क. रा. बी. नि. आदर्श अस्पताल, बेलतला, गुवाहाटी - 22**  
**E.S.I.C. MODEL HOSPITAL, BELTOLA, GUWAHATI - 22**  
**LABORATORY REPORT (Dept. of pathology)**

**FORM - A**

Regd. No. 5282 Date 7/10/23  
 Patient Name Binita Talukder Age 38 Sex F  
 Ins. No. 87171 Hospt. No. \_\_\_\_\_ Bed No. \_\_\_\_\_ Ward No. \_\_\_\_\_

TEST	FINDINGS	NORMAL RANGE
ESR	mm AEPH	M: 0 - 10 mm F: 0 - 20 mm
Haemoglobin	g/dl	M: 14.6 - 17.8 g/dl F: 12.1 - 15.9 g/dl
Total WBC	/cu mm	4000 - 11000/cu mm
Total RBC	million / cu mm	M: 4.6 - 6.1 million / cu mm F: 3.8 - 5.5 million / cu mm
Platelet Count	Lakh / cu mm	1.5 - 4.5 Lakh / cu mm
BT	Min Secs	2 - 7 min
CT	Min Secs	5 - 10 min
ABC	/cu mm	40 - 440 / cu mm
PBS FOR MP		

**DIFF**

Polymorph	%	40 - 75 %
Lymphocytes	%	20 - 40 %
Monocytes	%	2 - 8 %
Eosinophil	%	1 - 6 %
Basophil	%	0 - 1 %
PCV	%	M: 42 - 52 % F: 36 - 46 %
MCV	um <sup>3</sup>	76 - 96 um <sup>3</sup>
MCH	pg	27 - 32 pg
MCHC	%	30 - 35 %

**OTHERS**

- HIV 1 & 2 Test
- HBs Ag Test
- HCV Test
- VDRL/TPHA Test
- ASO Titre
- CRP
- RA factor
- PF & PV Antigen Test
- Typhi Dot: Ig M
- Typhi Dot: Ig G
- Dengue Test
  - NS, Ag
  - Ig M
  - Ig G

**Idal Test (Tube / Slide Method)**

	1:20	1:40	1:80	1:160	1:320

TEST	FINDINGS	NORMAL RANGE
Blood Sugar (Random)	mg/dl	74 - 150 mg/dl
Blood Sugar (Fasting)	mg/dl	74 - 110 mg/dl
Blood Sugar (PP) (12 Hrs after food)	mg/dl	Upto 140 mg/dl
Urea	mg/dl	18 - 55 mg/dl
Creatinine	mg/dl	M: 0.70 - 1.30 mg/dl F: 0.6 - 1.1 mg/dl
Total Cholesterol	mg/dl	0 - 200 mg/dl
Triglyceride	mg/dl	40 - 160 mg/dl
HDL Cholesterol	mg/dl	35.3 - 79.5 mg/dl
LDL Cholesterol	mg/dl	<130 mg/dl
VLDL Cholesterol	mg/dl	7 - 32 mg/dl
Uric Acid	mg/dl	M: 3.5 - 7.0 mg/dl F: 2.4 - 5.7 mg/dl
SGOT (AST)	IU/L	0 - 35.0 IU/L
SGPT (ALT)	IU/L	0 - 45.0 IU/L
Alkaline Phosphatase	IU/L	ADULT: 53 - 128 IU/L CHILD: 210 - 810 IU/L
GGT	IU/L	0 - 55 IU/L
Total Bilirubin	mg/dl	0.0 - 2.0 mg/dl
Direct Bilirubin	mg/dl	0 - 0.2 mg/dl
Indirect Bilirubin	mg/dl	0.2 - 0.8 mg/dl
Total Protein	g/dl	6.4 - 8.3 g/dl
Albumin	g/dl	3.5 - 5.2 g/dl
Globulin	g/dl	1.5 - 3.5 g/dl
Amylase	IU/L	22 - 80 IU/L
Lipase	IU/L	0.0 - 60.0 IU/L
Sodium (Na)	mmol/L	135 - 145 mmol/L
Potassium (K)	mmol/L	3.5 - 5.3 mmol/L
Chloride (Cl)	mmol/L	98 - 107 mmol/L
Ca <sup>2+</sup>	mg/dl	8.6 - 10.2 mg/dl
P. Time (T)	sec	
(C)	sec	
INR		
ABO		
Rh		
T3	ng/mL	0.6 - 1.81 ng/mL
T4	ng/mL	5.01 - 12.45 ng/mL
TSH	uIU/mL	0.35 - 3.50 uIU/mL
FT3	pg/mL	2.3 - 4.2 pg/mL
FT4	ng/dL	0.89 - 1.76 ng/dL
HbA1c Test	%	Normal < 5.7% Pre Diabetes 5.7 - 6.4% Diabetes > 6.5%

MONTOUX TEST (ST.U/10 T.U.)

Pathologist



*Case F*  
**क. रा. बी. नि. आदर्श अस्पताल, बेलतला, गुवाहाटी - 22**  
**E.S.I.C. MODEL HOSPITAL, BELTOLA, GUWAHATI - 22**  
**LABORATORY REPORT (Dept. of pathology)**

**FORM - A**

Regd. No. 2689 Date 22/5/24  
 Patient Name Nikmala sinha Age 45 Sex F  
 Lab. No. 0117 Hospt. No. \_\_\_\_\_ Bed No. \_\_\_\_\_ Ward No. \_\_\_\_\_

HAEMATOLOGICAL TEST		
TEST	FINDINGS	NORMAL RANGE
ESR	mm AEFH	M: 0 - 10 mm F: 0 - 20 mm
Hemoglobin	g/dl	M: 14.6 - 17.8 g/dl F: 12.1 - 15.9 g/dl
Total WBC	/ cu mm	4000 - 11000/ cu mm
Total RBC	million / cu mm	M: 4.6 - 6.1 million / cu mm F: 3.8 - 5.5 million / cu mm
Platelet Count	Lakh / cu mm	1.5 - 4.5 Lakh / cu mm
BT	Min Secs	2 - 7 min
CT	Min Secs	5 - 10 min
AEC	/cu mm	40 - 440 / cu mm
PBS FOR MP		

DLC		
Polymorph	%	40 - 75 %
Lymphocytes	%	20 - 40 %
Monocytes	%	2 - 8 %
Eosinophil	%	1 - 6 %
Basophil	%	0 - 1 %
PCV		
	%	M: 42 - 52 % F: 36 - 46 %
MCV	µm <sup>3</sup>	76 - 96 µm <sup>3</sup>
MCH	pg	27 - 32 pg
MCHC	%	30 - 35 %

- OTHERS**
- HIV 1 & 2 Test
  - HBs Ag Test
  - HCV Test
  - VDRL/TPHA Test
  - ASO Titre : 0 - 200 IU/ml
  - CRP : 0 - 6.0 mg/dl
  - RA factor : 0 - 20.0 IU/ml
  - FF & PV Antigen Test
  - Typhi Dot Ig M
  - Typhi Dot Ig G
  - Dengue Test
    - NS Ag
    - Ig M
    - Ig G
  - Widal Test (Tube / Slide Method)

TITRE	1:20	1:40	1:80	1:160	1:320
"O"					
"H"					
"AH"					
"BH"					

PBS STUDY:

BIO-CHEMICAL TEST		
TEST	FINDINGS	NORMAL RANGE
Blood Sugar (Random)	mg/dl	74 - 150 mg/dl
Blood Sugar (Fasting)	mg/dl	74 - 110 mg/dl
Blood Sugar (PP) (1 1/2 Hrs after food)	mg/dl	Upto 140 mg/dl
Urea	mg/dl	18 - 55 mg/dl
Creatinine	mg/dl	M: 0.70 - 1.30 mg/dl F: 0.6 - 1.1 mg/dl
Total Cholesterol	mg/dl	0 - 200 mg/dl
Triglyceride	mg/dl	40 - 160 mg/dl
HDL Cholesterol	mg/dl	35.3 - 79.5 mg/dl
LDL Cholesterol	mg/dl	<130 mg/dl
VLDL Cholesterol	mg/dl	7 - 32 mg/dl
Uric Acid	mg/dl	M: 3.5 - 7.0 mg/dl F: 2.4 - 5.7 mg/dl
SGOT (AST)	IU/L	0 - 35.0 IU/L
SGPT (ALT)	IU/L	0 - 45.0 IU/L
Alkaline Phosphatase	IU/L	ADULT: 53 - 128 IU/L CHILD: 210 - 810 IU/L
GGT	IU/L	0 - 55 IU/L
Total Bilirubin	mg/dl	0.0 - 2.0 mg/dl
Direct Bilirubin	mg/dl	0 - 0.2 mg/dl
Indirect Bilirubin	mg/dl	0.2 - 0.8 mg/dl
Total Protein	g/dl	6.4 - 8.3 g/dl
Albumin	g/dl	3.5 - 5.2 g/dl
Globulin	g/dl	1.5 - 3.5 g/dl
Amylase	IU/L	22 - 80 IU/L
Lipase	IU/L	0.0 - 60.0 IU/L
Sodium (Na)	m mol/L	135 - 145 m mol/L
Potassium (K)	m mol/L	3.5 - 5.3 m mol/L
Chloride (Cl)	m mol/L	98 - 107 m mol/L
Ca <sup>2+</sup>	mg/dl	8.6 - 10.2 mg/dl
P. Time (T)	sec	
(C)	sec	
INR		
ABO		
Rh		
T3	ng/mL	0.6 - 1.81 ng/mL
T4	µg/mL	5.01 - 12.45 µg/mL
TSH	µIU/mL	0.35 - 5.50 µIU/mL
FT3	pg/mL	2.3 - 4.2 pg/mL
FT4	ng/dL	0.89 - 1.76 ng/dL
HbA1c Test	%	Normal < 5.7% Pre Diabetes 5.7 - 6.4% Diabetes > 6.5%

MONTOUX TEST (5 T.U./10 T.U.)

Lab. Technician

Pathologist



**क. रा. बी. नि. आदर्श अस्पताल, बेलतला, गुवाहाटी - 22**  
**E.S.I.C. MODEL HOSPITAL, BELTOLA, GUWAHATI - 22**  
**LABORATORY REPORT (Dept. of pathology)**

**FORM - A**

Regd. No. 5281 Date 7/10/23  
 Patient Name Nirmala Sinha Age 44 Sex F  
 Ins. No. OUT Hospt. No. \_\_\_\_\_ Bed No. \_\_\_\_\_ Ward No. \_\_\_\_\_

HAEMATOLOGICAL TEST		
TEST	FINDINGS	NORMAL RANGE
ESR	mm AEPH	M : 0 - 10 mm F : 0 - 20 mm
Hemoglobin	g/dl	M : 14.6 - 17.8 g/dl F : 12.1 - 15.9 g/dl
Total WBC	/ cu mm	4000 - 11000/ cu mm
Total RBC	million / cu mm	M : 4.6 - 6.1 million / cu mm F : 3.8 - 5.5 million / cu mm
Platelet Count	Lakh / cu mm	1.5 - 4.5 Lakh / cu mm
BT	.....Min.....Secs	2 - 7 min
CT	.....Min.....Secs	5 - 10 min
ABC	/cu mm	40 - 440 / cu mm
PBS FOR MP		

DIFF		
	%	
Polymorph	%	40 - 75 %
Lymphocytes	%	20 - 40 %
Micocytes	%	2 - 8 %
Eosinophil	%	1 - 6 %
Basophil	%	0 - 1 %
PCV	%	M: 42 - 52 % F : 36 - 46 %
MCV	µm <sup>3</sup>	76 - 96 µm <sup>3</sup>
MCH	pg	27 - 32 pg
MCHC	%	30 - 35 %

- SERUM**
- HIV 1 & 2 Test : \_\_\_\_\_
  - HBs Ag Test : \_\_\_\_\_
  - HCV Test : \_\_\_\_\_
  - VDRL/TPHA Test : \_\_\_\_\_
  - ASO Titre : \_\_\_\_\_ 0 - 200 IU/ml
  - CRP : \_\_\_\_\_ 0 - 6.0 mg/dl
  - RA factor : \_\_\_\_\_ 0 - 20.0 IU/ml
  - PF & PV Antigen Test : \_\_\_\_\_
  - Typhi Dot : Ig M : \_\_\_\_\_
  - Ig G : \_\_\_\_\_
  - Dengue Test : \_\_\_\_\_
  - NS, Ag : \_\_\_\_\_
  - Ig M : \_\_\_\_\_
  - Ig G : \_\_\_\_\_

Widal Test (Tube / Slide Method) :

TITRE	1:20	1:40	1:80	1:160	1:320
"O"					
"H"					
"AH"					
"BH"					

BIOCHEMICAL TEST		
TEST	FINDINGS	NORMAL RANGE
Blood Sugar (Random)	mg/dl	74 - 150 mg/dl
Blood Sugar (Fasting)	mg/dl	74 - 110 mg/dl
Blood Sugar (PP)	mg/dl	Upto 140 mg/dl
(1 1/2 Hrs after food)		
Urea	mg/dl	18 - 35 mg/dl
Creatinine	mg/dl	M: 0.70 - 1.30 mg/dl F: 0.6 - 1.1 mg/dl
Total Cholesterol	mg/dl	0 - 200 mg/dl
Triglyceride	mg/dl	40 - 160 mg/dl
HDL Cholesterol	mg/dl	35.3 - 79.5 mg/dl
LDL Cholesterol	mg/dl	<150 mg/dl
VLDL Cholesterol	mg/dl	7 - 32 mg/dl
Uric Acid	mg/dl	M: 3.5 - 7.0 mg/dl F: 2.4 - 5.7 mg/dl
SGOT (AST)	IU/L	0 - 35.0 IU/L
SGPT (ALT)	IU/L	0 - 45.0 IU/L
Alkaline Phosphatase	IU/L	ADULT: 53 - 128 IU/L CHILD: 210 - 810 IU/L
GGT	IU/L	0 - 55 IU/L
Total Bilirubin	mg/dl	0.0 - 2.0 mg/dl
Direct Bilirubin	mg/dl	0 - 0.2 mg/dl
Indirect Bilirubin	mg/dl	0.2 - 0.9 mg/dl
Total Protein	g/dl	6.4 - 8.3 g/dl
Albumin	g/dl	3.5 - 5.2 g/dl
Globulin	g/dl	1.5 - 3.5 g/dl
Amylase	IU/L	22 - 80 IU/L
Lipase	IU/L	0.0 - 60.0 IU/L
Sodium (Na)	m.mol/L	135 - 145 m.mol/L
Potassium (K)	m.mol/L	3.5 - 5.3 m.mol/L
Chloride (Cl)	m.mol/L	98 - 107 m.mol/L
Ca <sup>2+</sup>	mg/dl	8.6 - 10.2 mg/dl
P. Time (T)	sec	
(C)	sec	
INR		
ABO		
Rh		
T3	ng/ml	0.6 - 1.81 ng/ml
T4	µg/ml	5.01 - 12.45 µg/ml
TSH	µIU/ml	0.35 - 5.50 µIU/ml ✓
FT3	pg/ml	2.3 - 4.2 pg/ml
FT4	ng/dl	0.89 - 1.76 ng/dl
HbA1c Test	%	Normal <5.7% Pre Diabetes 5.7 - 6.4% Diabetes >6.5%

MONTOUX TEST (5 T.U./10 T.U.)  
*\*Fertudiving P10*

PBS STUDY:  
  
  
 Lab. Technician

Pathologist



**क. रा. बी. नि. आदर्श अस्पताल, बेलतला, गुवाहाटी - 22**  
**E.S.I.C. MODEL HOSPITAL, BELTOLA, GUWAHATI - 22**  
**LABORATORY REPORT (Dept. of pathology)**

**FORM - A**

Regd. No. 5399 Date 31/7/23  
 Patient Name Champa Ghosh Age 43 Sex F  
 Ins. No. 1236 Hospt. No. \_\_\_\_\_ Bed No. \_\_\_\_\_ Ward No. \_\_\_\_\_

HAEMATOLOGICAL TEST		
TEST	FINDINGS	NORMAL RANGE
ESR	mm AEFH	M : 0 - 10 mm F : 0 - 20 mm
Hemoglobin	g/dl	M : 14.6 - 17.8 g/dl F : 12.1 - 15.9 g/dl
Total WBC	/ cu mm	4000 - 11000/ cu mm
Total RBC	million / cu mm	M : 4.6 - 6.1 million / cu mm F : 3.8 - 5.5 million / cu mm
Platelet Count	Lakh / cu mm	1.5 - 4.5 Lakh / cu mm
BT	.....Min.....Secs	2 - 7 min
CT	.....Min.....Secs	5 - 10 min
AEC	/cu mm	40 - 440 / cu mm
PBS FOR MP		

**DLC**

Polymorph	%	40 - 75 %
Lymphocytes	%	20 - 40 %
Monocytes	%	2 - 8 %
Eosinophil	%	1 - 6 %
Basophil	%	0 - 1 %
PCV	%	M: 42 - 52 % F: 36 - 46 %
MCV	µm <sup>3</sup>	76 - 96 µm <sup>3</sup>
MCH	pg	27 - 32 pg
MCHC	%	30 - 35 %

**OTHERS**

- HIV 1 & 2 Test
- HBs Ag Test
- HCV Test
- VDRL/TPHA Test
- ASO Titre : 0-200 IU/ml
- CRP : 0-6.0 mg/dl
- RA factor : 0-20.0 IU/ml
- PF & PV Antigen Test
- Typhi Dot Ig M
- Ig G
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TITRE	1:20	1:40	1:80	1:160	1:320
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PBS STUDY :

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FT4	ng/dL	0.89 - 1.76 ng/dL
HbA1c Test		
		%
		Normal <5.7%
		Pre Diabetes 5.7 - 6.4%
		Diabetes > 6.5%

MONTOUX TEST (5 T.U./10 T.U.)

## Conclusion

The chosen homoeopathic remedies were very effective in all cases in this series; the patients reported reduction of TSH levels along with improved general well-being and the existing particular symptoms along with management of proper diet and regimen. Further, study is suggested for evaluating a larger spectrum of remedies in treating cases of hypothyroidism.

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