

# **BEACON HOSPITAL** Health report

NAME	MRS ALICE WALSH	PID	9016291
DATE OF BIRTH	13/12/1985	AGE	31
SEX	FEMALE	LABORATORY	GENERAL LAB
PHYSICIAN	DR. ANDREW WHITE	DATE OF VISIT	08/12/16

#### PRESENT MEDICAL HISTORY

Currently feels well	
No Aches or Pains	0
Nil on systemic questioning	0
Last medical check up 2010 - nil reported	<b>⊘</b>

#### PAST MEDICAL / SURGICAL HISTORY

Nil chronic	<b>⊘</b>
No previous hospital admission	<b>⊘</b>
No previous surgery	<b>?</b>

#### GYNAECOLOGICAL HISTORY

No relevant	2

#### VACCINATION HISTORY

Up to date

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#### FAMILY HISTORY / RECORD

Father - High blood pressure

Mother - Stroke

Siblings - High Cholesterol

History of Cancer in family - Auntie has Breast Cancer

#### SOCIAL HISTORY

Works as a teacher

Non smoker

No alcohol

-Exercise - regular

Diet - No strict dietary restriction

#### CURRENT MEDICATION AND DURATION

No regular medication

#### **HISTORY OF ALLERGIES**

No allergies to food or medication





Your medical today reveals that you have high cholesterol. The rest of your examination did not reveal anuthing else of clinical significance. May I suggest that you:

# Make your lifestyle changes with regards to your diet and exercise.

This will help optimize your weight, improve your cholesterol and also reduce your risk of developing chronic disease. Please take into consideration what we have discussed and refer to the leaflet that we have given you.

Please do not hesitate to contact us if you have any queries.

**Dr. Andrew White** 



#### HEAD & NECK

Looks comfortable. No distress.	0
Not clinically anaemic or jaundiced.	0
No lymphadenopathy.	0
Ear nose and throat appears normal.	0

#### CARDIOVASCULAR SYSTEM



Pulse 66 reg. BP 120/66. JVP not raised.	0
No heaves or thrills noted on palpation.	0
Heart sounds normal. No added sounds or murmurs.	0
No evidence or heart failure.	0

#### **RESPIRATORY SYSTEM**

Normal bilateral chest expansion.	0
RR 20 per minute. Good air entry bilaterally.	Ø
Vesicular breath sounds. No creps or wheeze.	Ø
Chest Clear.	0



#### ADBOMEN

Normal on inspection.	<b>⊘</b>
Soft, non tender with no rebound or guarding.	<b>?</b>
No masses or organomegaly.	Ø
Bowel sounds normal.	<b>⊘</b>

0



#### BREAST EXAMINATION

#### Not done

#### MUSCULOSKELETAL SYSTEM

Normal power and movement in upper and lower limbs.	0
No gross sensory deficit.	0

#### PELVIC EXAMINATION (WHERE RELEVANT)



Not done.



# Your Blood Group is A Rh (D) Positive

**Blood group A** has A antigens on the red blood cells with anti-B antibodies in the plasma

# Red Blood Cells



#### Mean Corpuscular Volume (MCV)

Unit: fL



# Mean Corpuscular Hemoglobin (MCH)

onit: pg	<b>30</b> Pg	
<27	27 - 32	>32
LOW	OPTIMAL	HIGH

#### $Mean\ Corpuscular\ Hemoglobin\ Concentration\ (\mathsf{MCHC})$

Unit: g/L <300
300 - 360
>360
LOW
OPTIMAL
HIGH

#### Red Blood Cell Distribution Width (RDW)

Unit: %



#### White Cell Count





### White cell count chart precentages

White blood cells (leukocytes) are the main cells involved in immune defence, and there are several types, including lymphocytes, monocytes, neutrophils, eosinophils, and basophils. The numbers of each cell type can vary in response to allergies, bacteria and viruses, as well as other conditions.







The haematology parameters are essentially normal.

## Validated by Muhamad Nazrin Sarafuddin (Dip MLT Asia Metro.Univ.)



#### You are Diabetic with Satisfactory control

NGSP: 6.5% Result: 48 mmol/mol

#### HbA1c

NGSP (%)	IFCC (mmol/mol)	Glucose Control Index
<6.1	<43	Non-diabetic range
6.1 - 6.4	43 - 46	Diabetic with good control
6.5 - 7.5	48 - 58	Diabetic with Satisfactory control
>7.5	>58	Diabetic with poor control

Effective 04/01/2011, glycated haemoglobin is analysed using Roche Integra platform Effective 07/06/2016, dual reporting of HbA1c results in NGSP and IFCC format.



Glucose result indicates fasting hyperglycaemia. Advice repeat fasting and 2 hour post-prandial glucose to confirm if indicated. Specimen Collection Time : 09:50h



# Lipids

Your results indicate that you have moderate hypertriglyceridemia

# Lipids



#### HDL Cholesterol









#### Total Cholesterol / HDL ratio





Your Risk of developing Coronary Heart Disease within the next **10 years** is: **5%** 

Source: The Framingham Study for developing chronic heart disease.

# 

A 5% risk means that in a group of 20 people like you, 1 will have developed coronary heart disease in the next 10 years.



# Electrolytes

Your **electrolytes** results are within the **normal range** 

# Electrolytes



## Renal Function Test (RFT)



#### Uric Acid

Unit: mmol/L





# Liver function

Your liver function results are within the normal range

# Liver Function Test (LFT)



# Albumin/Globulin ratio



#### Alkaline Phosphatase

Unit: U/L



#### Total Bilirubin







# Validated by N.Mohanaraja B. BioMedical Sc. (Hons) UM, Dip MLT (USM).



#### **Rhematoid Screen**

Your **rhematoid screen** results are within the **normal range** 

# **Rhematoid Screen**

#### **Rheumatoid Factor**

Unit: IU/ml
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#### **Homocysteine Studies**

#### Serum Homocysteine

Unit: umol/L





## Hepatitis

This is a screening test only. The presence of HBsAg may also indicate either acute or chronic Hepatitis B infection. To clarify status suggest liver function test., AFP and further serology tests (e.g. HBeAg, anti-HBc IgM, anti-HBc IgG).

## Hepatitis

Hep .B surface antigen (HbsAg)	Hep .B surface antibody (HBsAb)
DETECTED	0 IU/L



# Urine Feme

Your **urine feme** results are within the **normal range** 

# Chemistry

Protein	Nil
Glucose	Nil
S.G.	1.006
рН	6.5
Ketones	Nil
Blood	Nil



# Erythrocytes

Unit: x10<sup>6</sup>/L



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OPTIMAL

HIGH

Serum CA 19 Unit: U/ml	.9 12 U/ml		Specimen: Serum
	<32	>32	
	OPTIMAL	HIGH	
C.E.A Unit: ug/L	0.9 ug/L		Specimen: Serum
	<5.1	>5.1	
	OPTIMAL	HIGH	



# **Thyroid Function Assays**

Your Thyroid Function results are within the normal range

# **Thyroid Function Assays**



Section Two

# Food Allergies & Intolerances

Section Two

# Food Allergies & Intolerances

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# Dairy & Egg

Milk allergy is far more common in children than in adults. 90% of milk allergic children lose the allergy by the age of three. It is extremely uncommon for adults to have milk allergy. Many adults, however, cannot tolerate milk because of an inborn deficiency in the ability to break down the milk sugar, lactose.

		NORMAL	BORDERLINE	ELEVATED
Food Type	Results (U/ml)	<23 U/ml	24-29 U/ml	>30 U/ml
Alpha-Lactalbumin	0		l	
Beta-Lactoglobulin	1		l	
Casein	39			
Egg White	79		I	
Egg Yolk	26			I
Milk (Buffalo)	0		l	
Milk (Cow)	105			
Milk (Goat)	36			
Milk (Sheep)	38			



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# Grains (Gluten-Containing)

Wheat allergy is most common in children; about two-thirds of them outgrow it at a relatively young age. Though many patients with wheat allergy can eat other grains, that's not true for everyone. Talk with your allergist about what you can safely eat and what you should avoid.

		NORMAL	BORDERLINE	ELEVATED
Food Type	Results (U/ml)	<23 U/ml	24-29 U/ml	>30 U/ml
Barley	43			
Couscous	25			
Durum Wheat	28			I
Gliadin	53			
Malt	13		•	
Oat	18		•	
Rye	9		•	
Spelt	48			
Wheat	48			
Wheat Bran	27			•

Elevated Foods

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# **Elevated Foods**

Elevated results indicate that the level of IgG antibody detected is equal or greater than 30 U/ml, and therefore a high reaction is detected. The foods listed below should be eliminated for a period from your diet. Please refer to the further information before removing or substituting foods.

Food Type	Results	ELEVATED
	(U/ml)	~50 0/11t
Milk (Cow)	105	
Egg White	79	
Potato	61	
Gliadin	53	
Bean (Red Kidney)	52	
Spelt	48	
Wheat	48	
Hazelnut	47	
Barley	43	
Casein	39	

Elevated Foods

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# **Borderline Foods**

Borderline results indicate that the level of IgG antibody detected is between 24 and 29 U/ml, and therefore a moderate reaction is detected. The foods listed below should be reduced or rotated in your diet.

		ELEVATED
Food Type	(U/ml)	24-29 U/ml
Pike	29	
Durum Wheat	28	
Wheat Bran	27	
Egg Yolk	26	
Mussel	26	
Pistachio	26	
Cashew Nut	26	
Couscous	25	
Ginkgo	25	
Sea Bream (Red)	24	

Elevated Foods

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# **Normal Foods**

Normal results indicate that the level of IgG antibody detected is less than or equal to 23 U/ml, and therefore no signification reaction is detected. The foods listed below do not need to be restricted, unless you have previously experiences an adverse reaction.

- 1-		ELEVATED	
Food Type	(U/ml)	<23 U/ml	
Almond	22		
Celery	20		
Guava	20		
Bean (White Haricot)	19		
Cola Nut	19		
Crab	19		
Coconut	18		
Oat	18		
Soya Bean	18		
Tiger Nut	17		

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Food Type	Results	ELEVATED	
rood rype	(U/ml)	<23 U/ml	
Yeast (Baker's)	16		
Cabbage (Savoy/White)	15		
Bean (Broad)	14		
Orange	14		
Pomegranate	14		
Malt	13		
Peanut	13		
Radish	13		
Squash (Butternut)	13		
Broccoli	12		
Cherry	12		
Herring	12		
Mackerel	12		
Agar Agar	11		

Section Three

# Imaging

Section Three

# Imaging

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# **Anterior Posterior Spine Results**

The T-score as compared to the WHO classification for Bone Mineral Density (BMD) indicates Normal of the Lumbar vertbrae.

MEASURED DATE:	13/12/1985
SCANNER TYPE:	GE Lunar Prodigy Advance
PHYSICIAN	DR. ANDREW WHITE





Region	BMD (g/cm2)	Young Adult1 (T-score)	Age-Matched2 (Z-score)
L1	1.383 g/cm²	2.8	3.0
L2	1.502 g/cm <sup>2</sup>	3.2	3.4
L3	1.648 g/cm <sup>2</sup>	4.3	4.4
L4	1.617 g/cm²	4.0	4.2
L1-L4	1.544 g/cm²	3.6	3.8

1- Asia (ages 20-40) AP Spine and Femur Reference Population

2- Matched for Age, Weight (males/females 25-100g) and Ethnic

#### WHO Classification

Normal: T-score at or above -1.0 SD

Osteopenia: T-score between -1.0 and -2.5 SD

Osteoperois: T-score above -2.5 SD

#### Left Femur Results

The T-score as compared to the WHO classification for Bone Mineral Density (BMD) indicates Normal of the left femur.



Region (Left)	BMD (g/cm2)	Young Adult1 (T-score)	Age-Matched2 (Z-score)
Neck	0.875 g/cm²	-0.3	0.2
Wards	0.712 g/cm²	-1.2	-0.5
Troch	0.617 g/cm <sup>2</sup>	-1.3	-1.2
Shaft	1.224 g/cm²	N/A	N/A
Total	0.940 g/cm²	-0.1	0.2

1- Asia (ages 20-40) AP Spine and Femur Reference Population

2- Matched for Age, Weight (males/females 25-100g) and Ethnic

#### WHO Classification

Normal: T-score at or above -1.0 SD

Osteopenia: T-score between -1.0 and -2.5 SD

Osteoperois: T-score above -2.5 SD

#### 10-year Probability of Fracture<sup>1</sup>

We have calculated the probability of a fracture to the left femur for the next 10 years.

Major Osteoporotic Fracture<sup>2</sup>

1.6%

= 1 person

Your risk of a fracture to the spine, forearm, hip or shoulder in the next 10 years is 1.6%. This means **1** in **63** people like you would experience a fracture within 10 years.



Hip Fracture<sup>2</sup> 0.1%

Your risk of a fracture to the hip in the next 10 years is 0.1%. This means 1 in 1000 people like you would experience a fracture within 10 years.



Based on Femur (Left) Neck BMD

1- The 10-year probability of fracture may be lower than reported if the patient has recived treatment

2- Major Osteoporotic Fracture: Clinical Spine, Forearm, Hip or Shoulder

\*FRAX is a trademark of the University of Sheffield Medical School's Centre for Metabolic Bone Disease, a World Health Organization (WHO) Collaborating Centre

#### **Right Femur Results**

The T-score as compared to the WHO classification for Bone Mineral Density (BMD) indicates Normal of the right femur.

![](_page_40_Picture_4.jpeg)

![](_page_40_Figure_5.jpeg)

Region (Left)	BMD (g/cm2)	Young Adult1 (T-score)	Age-Matched2 (Z-score)
Neck	0.875 g/cm²	-0.3	0.2
Wards	0.712 g/cm <sup>2</sup>	-1.2	-0.5
Troch	0.617 g/cm <sup>2</sup>	-1.3	-1.2
Shaft	1.224 g/cm²	N/A	N/A
Total	0.940 g/cm²	-0.1	0.2

1- Asia (ages 20-40) AP Spine and Femur Reference Population

2- Matched for Age, Weight (males/females 25-100g) and Ethnic

#### WHO Classification

Normal: T-score at or above -1.0 SD

Osteopenia: T-score between -1.0 and -2.5 SD

Osteoperois: T-score above -2.5 SD

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= 1 person

#### 10-year Probability of Fracture<sup>1</sup>

We have calculated the probability of a fracture to the right femur for the next 10 years.

Major Osteoporotic Fracture<sup>2</sup>

1.6%

Your risk of a fracture to the spine, forearm, hip or shoulder in the next 10 years is 1.7%. This means **1** in **59** people like you would experience a fracture within 10 years.

![](_page_41_Picture_7.jpeg)

Hip Fracture<sup>2</sup> 0.1%

Your risk of a fracture to the hip in the next 10 years is **0.1%**. This means **1 in 1000** people like you would experience a fracture within 10 years.

![](_page_41_Picture_10.jpeg)

Based on Femur (Left) Neck BMD

1- The 10-year probability of fracture may be lower than reported if the patient has recived treatment

2- Major Osteoporotic Fracture: Clinical Spine, Forearm, Hip or Shoulder

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ns	s	Othe					
148 r	82 n						
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59 bpm	410/405 ms	Sinus brady					
Vent rate	QT/QTC						
			 5	5			$\leq$
					avr	aVL	aVF

0