# **MCG Report for Carla Room**

Summary Report Generated for Eternity Medicine Institute, LLC- Middle East by Premier Heart, LLC

### MCG Report for Carla Room

# **Table of Contents**

Carla Room	1 of 5
MCG Test Results	
Suggestions	
Disclaimer:	
About MCG <sup>TM</sup>	



## Carla Room

ID: 1307272 Name: Carla Room Gender: F Age: 38

### **MCG Test Results**

			Ischemia Results		
Test ID	<b>Testing Date</b>	<b>ECG Quality</b>	Local	Global	Score
35588097	2011-06-12 09:09:37	Good	None	Moderate	3

### Local Ischemia

Regional or patchy myocardial ischemia caused by mid- or distal single or double vessel CAD.

### Global ischemia

Diffuse myocardial ischemia caused by proximal large vessel CAD (usually two or more vessels are pathological) and/or microvascular disease affecting the entire myocardium.

## **Suggestions**

### Disease severity:

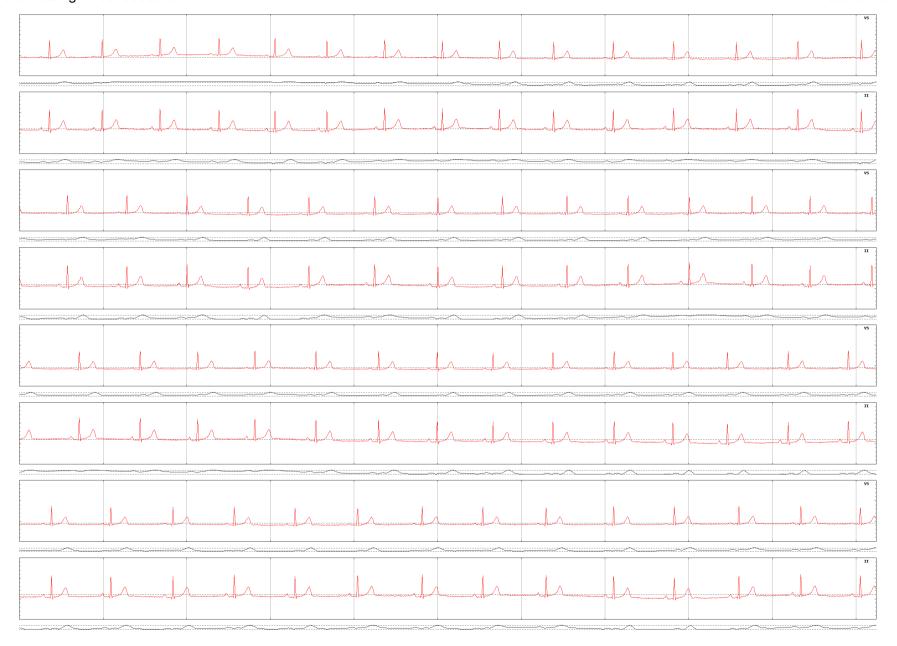
	Test	Severity	
35588097	2011-06-12 09:09:37	3: moderate	
	Disease Severity Range:		
0 = x	No disease burden		
0 < x <= 2	Mild disease burden		
2 < x <= 4	Moderate disease burd	en	
4 < x <= 5.5	Level 1 severe (moderately severe)		
5.5 < x <= 7.5	Level 2 severe (severe	)	
7.5 < x <= 15	Level 3 severe (very se	evere)	
15 < x	Level 4 severe (extrem	ely severe)	

Secondary results (pathological conditions):
Myocardial Damage
Ventricular Hypertrophy
■ Cardiomyopathy
Pulmonary Heart Disease
Fibrillation (likely atrial).
Ventricular arrhythmia.
Myocarditis or Myocardial Inflammation
Rheumatic Heart Disease or remnants thereof
Congenital Heart Disease or remnants thereof
Tertiary results (physiopathological conditions):
Myocardial remodeling.
Decreased myocardial compliance. Likely causes include ischemia, ventricular hypertrophy, increased
afterload, systemic hypertension.
☐ Increased myocardial compliance. Likely causes include ischemia, myocarditis, structural anomalies,
cardiomyopathy.
Decreased cardiac output reflected by decreased ejection fraction.
■ Bradycardia
☐ Tachycardia
Acute Power Failure. Likely conditions are ischemia heart disease, pump failure, supply and demand
imbalance.
Global asynchrony
Regional or localized asynchrony

#### Disclaimer:

This section contains comments and suggested diagnoses or conditions which require rigorous clinical validation.

These suggestions and comments should be considered expert opinions and not a definitive diagnosis.



### **Disclaimer:**

Clinical studies have shown that MCG<sup>TM</sup> has a sensitivity of 90+% with 7±2% false negative results and a specificity of 85+% with 15±3% false positive results in detecting ischemia due to coronary artery disease (**CAD**). A positive CAD ischemia result does not guarantee that the subject has the disease, and a negative CAD ischemia result does not guarantee that the subject does not have the disease.

#### MCG Detection Rates and Accuracy

Among patients with more then 70% coronary artery atherosclerotic plaque lumenal encroachments in single or multiple vessels, without any collateral circulation, MCG detection rates at approximately 90% or better.

MCG has an accuracy of approximately 90% in detecting patients with 50% or greater obstruction of the Left Main Coronary Artery and/or 70% or greater blockage in other large coronary arteries, i.e. LAD, RCA or L.Circ.

The MCG Detection Rates and Diagnostic Accuracy noted above are unaffected by gender, age or race. All statistics have been derived from multiple high-quality controlled and double-blind prospective studies published in peer-reviewed journals.

Supporting articles are available from the Premier Heart website, or upon request from Premier Heart.

MCG assumes that the subject has normal or corrected serum electrolyte chemistry and complete blood count (CBC). It also assumes that the subject has no structural anomalies of the myocardium. If these laboratory test results are unknown, dated, or abnormal at the time of this test, the results may be skewed.

There are roughly 15(±3)% false positive cases which include:

- Coronary artery vasospasms
- Coronary Arteriopathy (connective tissue disorders, vaculitides or aneurysms)
- Microvascular disease (peripheral vascular disease)
- Aortic stenosis/regurgitation
- Hypertensive heart disease and metabolic disorders
- Untreated or Under-Treated anemia
- Renal disease, (i.e. end stage renal disease)
- Angiographer under-estimation of the degree of obstruction
- Poor quality ECG tracings

There are about  $7(\pm 2)\%$  false negative cases which include:

- Well-established coronary collateral circulations with visibly poor coronary angiogram results
- $\bullet \ \ Coronary \ angiogram \ results \ showed \ moderate \ lumenal \ encroachments, however, the \ MCG \ test \ was \ negative.$
- Treatments using vaso-dilators
- Angiographer over-estimation of the degree of obstruction
- Poor quality ECG tracings

Finally, unlike the primary diagnosis of the presence or absence of local or global ischemia, the secondary findings of each test (such as MI, LVH, arrhythmias, etc) should be considered as a reference or an expert's opinions rather than definitive diagnosis. This is due to these findings requiring additional controlled, prospective and double blind studies for validations. The ultimate treatment decisions are between you and your physician(s).

### **Privacy Notice:**

This document contains proprietary and confidential material which is legally privileged. The contents of this document may not be disclosed or distributed without the consent of Premier Heart, LLC, or of the patient whose records are contained herein.

### **About MCG™**

MCG<sup>TM</sup> is a web-based, non-invasive diagnostic tool for aiding physicians in diagnosing multiple types of heart disease, including coronary artery disease (CAD). It adopts the principles of Systems Analysis in mathematically analyzing the digitized resting electrocardiograph (ECG) data from leads V5 and II simultaneously.

The results of the mathematical calculations are graphically represented as an auto power spectrum and its variations: phase shift, impulse response, coherence function, cross correlation and amplitude histogram. Collectively, these mathematical transformations supply various aspects of the electromechanical properties of the heart muscle in relationship to the physiological properties of the blood and its impact on the myocardial functions as a whole.

The abnormal "Ischemia Indexes" derived from each of these six functions are integrated into a mathematical pattern which represents the myocardium as a whole system which is used for complex pattern recognition. The computer statistically matches each individual's transformation set to the patterns of a large population consisting of thousands of healthy people and tens of thousands of people with heart diseases collected from years of clinical research, software development, and database collections. The computer analysis is then reported to a physician who determines the final diagnosis and therapeutic recommendations, if required.

For more details on MCGTM analysis, please visit http://www.premierheart.com/webapp/tech.php .