

# **Adenosine Myocardial Perfusion SPECT**

Patient Name: Normal, Example Referring Physician: Geoff Refman

Date of Study: **2010-01-01 Outpatient** 8700 Beverly Blvd. NT LL A047

ID Number: 98700004 Acct#:123456789 Los Angeles, CA, 90048

Age: **53** Sex: **F** DOB:**1957-01-01** Fax (310) 555-2233 Phone (310) 555-1234

Reason: abnormal ECG, chest pain

Symptom: atypical chest pain

Risk factors: family history of coronary disease
 Medications: HMG CoA reductase inhibitor

Height: 67 in. Weight: 220 lbs. Body Mass Index (BMI): 34.5

#### **Adenosine Stress ECG Results:**

Protocol duration = 09:00 minutes; Rest HR 62; Peak HR 96

Blood Pressure: Rest: 129/83; Stress: 146/77

Resting ECG: no abnormality

Stress ECG: no ST segment depression

#### **Nuclear Results:**

• Sestamibi (Same day) gated SPECT [stress/rest sestamibi (Supine)]

Technical quality: excellent

Myocardial Perfusion: Total perfusion defect 0% myocardium (0% reversible, 0% fixed)

no perfusion abnormalities.

LV enlargement: no; Visual TID: no; TID Ratio 1.00

• Myocardial Function: LVEF EDVi

Rest 70% 36 ml/ml2 Post Stress (85 min after) 74% 38 ml/ml2

Resting and adenosine stress gated SPECT revealed no wall motion abnormalities.

Conclusion: Clinical Response Nondiagnostic Perfusion Normal

ECG Response Nonischemic Function Normal

These test results indicate a low (<10%) likelihood for the presence of angiographically significant coronary artery disease.

Sean Hayes, M.D.

Sean WHayes

Stress ECG monitored and interpreted by Geoff Refman



#### S. MARK TAPER FOUNDATION IMAGING CENTER

## **SPECT: Myocardial Perfusion**

Patient Name: Normal, Example Referring Physician: Geoff Refman Date of Study: 2010-01-01 Outpatient 8700 Beverly Blvd. **NT LL A047** ID Number: 98700004 Acct#:123456789 Los Angeles, CA, 90048 Age: 53 Sex: F DOB:1957-01-01 Fax (310) 555-2233 Phone (310) 555-1234 **Short Axis** Short Axis **Short Axis** Vertical Long Axis **Basal Level** Apical Level Mid-Ventricular Normal Anterior Antero Antero Septal Lateral 6 Reversible 17 Septal Lateral Apical Infero Infero 15 3 Septa Nonreversible 10 Inferior Inferior SR SR SR 13. Anterior 07. Anterior 1. Anterior 00 00 0 = Normal=Mildly reduced Equivocal =Moderately 8. AnteroSeptal 2. AnteroSeptal 0 0 0 0 9. InferoSeptal 00 3. InferoSeptal 17. Apical 14. Septal 00 0 0 00 Reduced
3 = Severely Reduced
4 = Absent Uptake 15. Inferior 10. Inferior 4. Inferior 0nlo 0 0 11. InferoLateral 00 5. InferoLateral 00 S = Stress R = Rest  $0 \mid 0$ 16. Lateral 12. AnteroLateral 00 6. AnteroLateral 0 0 Stress Images Rest Images

Date of study	Results	%Total defects	%Reversible	%Fixed	Stress Type
2010-01-01	Normal	0%	0%	0%	Adenosine

Adenosine (70.0 mg IV) (same day protocol) gated myocardial perfusion SPECT using Tc-99m sestamibi (35.4 mCi IV) at stress and (8.7 mCi IV) at rest was performed using the rest/stress sequence. Sestamibi SPECT was performed in the supine position.

#### Findings:

no perfusion abnormalities.

Myocardial perfusion test result: normal.

Sean Haves, M.D.

Sean WHayes

%Myocardium		%Reversible		%Fixed		Vessel Descriptions
Normal/Equivocal	0-4%	Normal	0-2%	Normal/Equivocal	0-4%	RCA (Right Coronary Artery)
Mild	5-9%	Mild	3-5%	Mild	5-9%	LAD (Left Anterior Descending)
Moderate	10-14%	Moderate	6-9%	Moderate	10-14%	LCX (Left Circumflex)
Severe	>14%	Severe	>10%	Severe	>14%	DIAG (Diagonal)



#### S. MARK TAPER FOUNDATION IMAGING CENTER

## **SPECT: Ventricular Function**

Patient Name: Normal, Example Referring Physician: Geoff Refman

Date of Study: 2010-01-01 Outpatient

8700 Beverly Blvd.
NT LL A047

ID Number: 98700004 Acct#:123456789

Los Angeles, CA, 90048

Age: **53** Sex: **F** DOB:**1957-01-01** Fax (310) 555-2233 Phone (310) 555-1234

Short Axis Apical Level		Short Axis Mid-Ventricular		Short Axis Basal Level		Vertical Long	g Axis	Normal
Anterior  Septal 13 16 Lateral  Inferior		Anterior  Anterior  Anterior  7  Anterior  7  Anterior  12  Antero  Lateral  Infero Septal  Inferior  Inferior		2 1 6 5		17 Apical		Moderate / Severe Hypokinesis Akinesis Dyskinesis
	S R	S F	•		S R		S R	
13. Anterior	00	7. Anterior 0 0	1. A	nterior	00			0 =Normal 1 =Mild Hypokinesis
		8. AnteroSeptal 0 0		nteroSeptal	00			2 = Moderate Hypokinesis
14. Septal	00	9. InferoSeptal 0 0		nferoSeptal	00	17. Apical	00	3 =Severe
15. Inferior	0 0	10. Inferior 0 0		nferior	0 0			Hypokinesis 4 = Akinesis
		11. InferoLateral 0 0		nferoLateral	00			5 = Dyskinesis
16. Lateral	0 0	12. AnteroLateral 0 0		nteroLateral	00			S = Stress R = Rest

	Rest						
Date of study	EF	EDV	EDVi	EF	EDV	EDVi	TID ratio
2010-01-01	70%	75 ml	36 ml/m2	74%	81 ml	38 ml/m2	1.00

Resting and adenosine stress gated SPECT revealed no wall motion abnormalities.

Wall motion results: normal

Sean WHayes

Sean Hayes, M.D.

	Men	Women			
Normal EF (mean - 2sd)	>42%	>50%			
Severely Reduced EF	<30%	<35%			
Normal EDV (mean + 2sd)	<150 ml	<103 ml			
Normal EDVi (mean + 2sd)	<76 ml/m2	<61 ml/m2			
Sharir et al., J. Nucl Cardiol 2006;13:495-50					

EF	Ejection Fraction
EDV	End Diastolic Volume
EDVi	End Diastolic Volume index
TID	Transient Ischemic Dilation

Electronically Signed: 2010-01-01 18:54



## Adenosine Stress Electrocardiography

Patient Name: Normal, Example Referring Physician: Geoff Refman

Date of Study: 2010-01-01 Outpatient

8700 Beverly Blvd.

NT LL A047

98700004 Acct#:123456789 Los Angeles, CA, 90048

Age: **53** Sex: **F** DOB:**1957-01-01** Fax (310) 555-2233 Phone (310) 555-1234

A total of 70 mg of Adenosine was infused. A standard 12 LEAD ELECTROCARDIOGRAM was recorded in the supine position with continuous ECG monitoring throughout infusion and recovery. Additionally, 12 LEAD

ELECTROCARDIOGRAMS were recorded every minute.

Aden	osine	Phy	vsial	ouv
Aucii	031110		,	2 M Y

ID Number:

Resting Hemodynamics	Heart Rate: 62	Blood Pressure: 129/83
Arrhythmia	None	

	Stress							Red	covery
Minutes	HR	BP	MPH	Grade	METS	Comments	HR	BP	Comments
1	70					flush, neck and chest	85		
						discomfort			
2	93	146/77					80	148/75	
3	89						73		symptoms resolved
4	96	146/73					69	135/80	
5	94						67		

#### Electrocardiogram

Rest	no abnormality
Stress	
V5	Maximum Abnormality: None
AVF	Maximum Abnormality: None

Date of study	Stress	Duration	Peak HR	Clinical	ECG	
2010-01-01	Adenosine	09:00	96(57 %)	Nondiagnostic	Nonischemic	
Impression						

Clinical response to Adenosine: Nondiagnostic with chest discomfort

ECG response to Adenosine: Nonischemic

Stress ECG monitored and interpreted by Geoff Refman

Sean Hayes, M.D.

Sean WHayes

Electronically Signed: 2010-01-01 18:54