**Myocardial Perfusion Imaging**

**Patient Name:** Doe, Jack **Sex:** Male

**ID Number:** 123000 **Referring Physician:** Dr. Who

**Date of Birth:** 05/07/1945 **Date of Exam:** 11/20/2021

**Height:** 64 inches

**Weight:** 145 lbs

**Protocol:** 1 Day Exercise rest/stress Tc99m Myoview

**History:** This is a 70 year old man with a history of coronary artery disease. He had coronary artery bypass surgery in 1996.

**Clinical Indications:** Assessment of chest pain

**Procedure:** The patient performed treadmill exercise using a modified BRUCE protocol completing 5 minutes and an estimated workload of 10 METS. The patient developed shortness of breath during the procedure. Heart rate was 47 bpm at baseline increasing to135 bpm at peak exercise. The blood pressure response was hypertensive. The baseline blood pressure was 160/88 mmHg and 192/68 mmHg at peak exercise. The resting EKG was abnormal and the peak EKG demonstrated no ischemic changes. There were no significant dysrhythmias noted during exercise or recovery.

At rest 10.2 mCi Tc99m Myoview was injected intravenously followed by SPECT imaging. At 30 seconds after the Regadenoson injection 31. 2mCi Tc99m Myoview was injected intravenously. SPECT imaging was performed with electrocardiographic gating.

**Findings:** The overall quality of the study is good. Left ventricular cavity size is normal. LVH is absent. TID ratio is normal. There is no significant motion artifact.

The SPECT images demonstrate a medium sized area of severely reduced perfusion in the anterior apical and inferoapical regions of the left ventricle. When comparing rest and stress images this defect is completely fixed and consistent with a LAD territory infarct. The post exercise gated study demonstrates akinesis of the anterior apical, apical, and inferoapical regions of the left ventricle. The post stress ejection fraction is calculated at 36%.

**Impression:**

1. This is an abnormal myocardial perfusion study demonstrating evidence for his LAD territory infarct with corresponding wall motion abnormalities and an abnormal post stress ejection fraction calculated to be 36%.
2. Patient exercised to 10 METS and reached 91% MPHR which is consistent with a high sensitivity study.
3. Compared to the prior study from 2011, there is no significant change in perfusion. The ejection fraction is slightly lower at 36%.

*Electronically signed by Maria Costello, MD 11/20/2021 10:51*