

Nuclear Stress Test Protocol

NUCLEAR STRESS TEST PROTOCOL INDICATIONS AND CONTRAINDICATIONS

TREADMILL STRESS TEST

INDICATIONS

- Patients with detection of obstructive coronary artery disease
- Risk stratification of post-myocardial infarction patients before discharge and early or late after discharge
- Risk stratification of patients with chronic stable CAD into a low-risk category that can be managed medically or into high risk category that should be considered for coronary vascularization.
- Risk stratification of low risk acute coronary syndrome patients.
- Risk stratification before noncardiac surgery in patients with known CAD or those with high-risk factors for CAD
- To evaluate the efficacy of therapeutic interventions and in tracking subsequent risk based on serial changes in myocardial perfusion in patients with known CAD.

CONTRAINDICATIONS

- High risk unstable angina
- Uncontrolled congestive heart failure
- Uncontrolled hypertension
- Uncontrolled arrhythmias
- Severe symptomatic aortic stenosis
- Acute pulmonary embolism
- Acute myocarditis or pericarditis
- Acute aortic dissection
- Severe pulmonary hypertension
- Acute myocardial infarction (>4days)
- Acute ill for any reason
- High degree AV block
- Inability to exercise adequately
- Patients with complete LBBB, permanent pacemakers, and ventricular pre-excitation should preferentially undergo pharmacologic stress test (Not Dobutamine).

INDICATIONS FOR EARLY TERMINATION OF TREADMILL

- Moderate-to-severe angina pectoris
- Marked dysnea or fatigue
- Patients request to terminate the test
- Excessive ST depression ($>2\text{mm}$)
- ST elevation ($>1\text{mm}$)
- Sustained supraventricular or ventricular tachycardia
- Development of LBBB
- Drop in systolic blood pressure of $>10\text{mm Hg}$ from baseline
- Hypertensive response systolic >230 and diastolic >110)

ADENOSINE STRESS TEST

INDICATIONS

- Inability to perform adequate exercise due to non-cardiac physical limitations
- Baseline EKG abnormalities like LBBB and ventricular pre-excitation

CONTRAINDICATIONS

- Asthmatic patients with ongoing wheezing should not undergo adenosine stress test
- Second- and third- degree AV blocks without a pace maker
- Systolic pressure less than 90mm Hg
- Recent use of Dipyridamole or Dipyridamole medications
- Any known hypersensitivity to adenosine
- Profound sinus bradycardia (heart rates $>40\text{ B/Min}$)

INDICATIONS FOR EARLY TERMINATION OF ADENOSINE INFUSION

- Severe hypotension (systolic $<80\text{mm Hg}$)
- Development of second degree or complete heart block
- Wheezing
- Severe chest pain associated with ST depression of 2mm or greater
- Patients request to stop

DIPYRIDAMOLE

INDICATIONS

- Same as for Adenosine

CONTRAINDICATIONS

- Same as for Adenosine