

3701-84-30 Appendix A

**Selected Criteria for Identifying High Risk Conditions
for Cardiac Catheterization**

Patients with the high-risk conditions listed below may require emergency catheter-based therapeutic interventions or open heart surgery. Hence, they shall undergo cardiac catheterization only in a catheterization laboratory that has open heart surgical support available on-site (i.e., accessible from the catheterization laboratory by gurney).

High-risk conditions for cardiac catheterization include:

- I. Critical left main stenosis or equivalent ischemia suggested by an early positive ischemic response on exercise testing, i.e.,
 - A. Abnormal horizontal or down sloping ST segment depression with all of the following:
 1. Onset at a heart rate of less than one hundred twenty (if not on beta blockers) or at less than six point five metabolic equivalents (mets);
 2. Magnitude greater than two point zero millimeters of depression;
 3. Post-exercise durations greater than six minutes; and
 4. Depression in multiple leads.
 - B. Abnormal systolic blood pressure response during progressive exercise with a sustained decrease of greater than ten millimeters of mercury or flat blood pressure response at less than one hundred thirty millimeters of mercury, with or without associated electrocardiogram (EKG) evidence of ischemia.
- II. Unstable angina pectoris that cannot be stabilized medically before catheterization or recurrent angina at rest refractory to maximal medical treatment.
- III. Unstable or acute myocardial infarction i.e.,
 - A. Acute ongoing q-wave myocardial infarction with persistent pain or unstable hemodynamics, except when appropriate emergency catheter-based intervention is required.
 - B. Acute q-wave or non q-wave myocardial infarction with persistent or recurrent angina refractory to medical therapy when emergency therapeutic catheterization is considered imminent.
- IV. Critical aortic stenosis as defined by current echo-Doppler criteria (i.e., mean gradient

greater than fifty millimeters of mercury, valve area less than seventy-five hundredths (.75) square centimeters, or a mean gradient less than fifty millimeters of mercury in the setting of left ventricular dysfunction).

- V. Uncompensated congestive heart failure refractory to medical management.
- VI. Reverse intra-cardiac shunts (e.g., Eisenmenger syndrome).
- VII. Known severe pulmonary hypertension.
- VIII. Uncontrolled ventricular arrhythmias.
- IX. Severe valvular dysfunction, especially in the setting of depressed left ventricular performance.

Other patients who shall not undergo cardiac catheterization in a laboratory that does not have on-site open heart surgical support include:

- I. Patients who require percutaneous coronary interventions, including percutaneous transluminal coronary angioplasty (PTCA) or another non-surgical coronary revascularization procedure. These procedures shall not be performed without on-site open heart surgical standby.
- II. Patients who require other therapeutic, except right heart ablation, OR high-risk procedures such as transeptal catheterization or direct ventricular puncture.
- III. Patients less than twenty-two years of age.