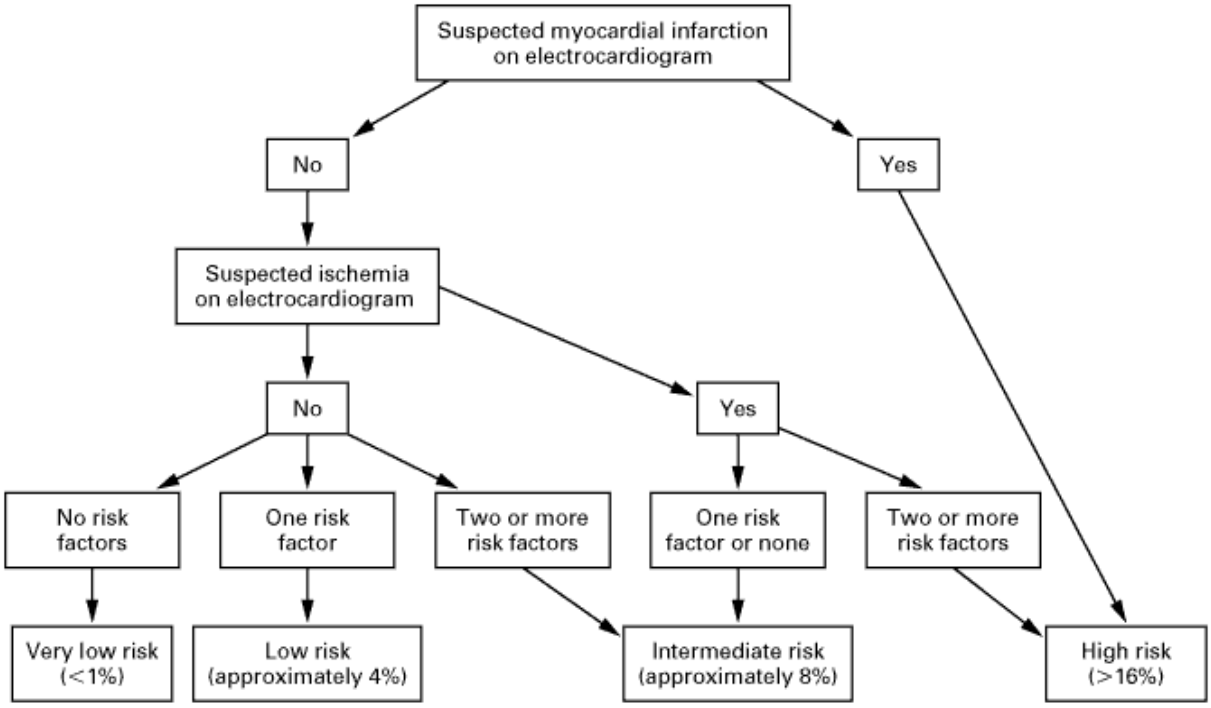
Cardiac CTA Protocol will be ED Attending initiated

Evaluation of Patient Appropriateness for Cardiac CTA Protocol
For: Patients Presenting With Chest Pain to the Emergency Department
Comment: any patients with known CAD should not be considered good candidates for CTA

Patients considered for Cardiac CTA must meet the **following criteria**:

1) Patient with presentation of chest pain felt to be *low to intermediate pretest likelihood* of having coronary ischemia as a cause of chest pain
2) Creatinine level < 1.8

Determination of pretest likelihood (Reilly-Goldman Criteria)



Risk Factors:

- **Systolic BP less than 110mmHg**
- **Rales heard above the bases bilaterally on physical exam**,
- **Known unstable ischemic heart disease** defined as worsening of previously stable angina, the new onset of postinfarction angina or angina after a coronary revascularization procedure, or pain that is same as that associated with a prior myocardial

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Contraindications for Cardiac CTA

- Inability to hold breath or cooperate
- Pregnancy
- History of severe contrast reaction
- Arrhythmia such as atrial fibrillation or other non-sinus rhythms
- Renal insufficiency
- Multiple Myeloma
- Sickle cell anemia
- Pheochromocytoma
- Contraindication to beta-blockers (relative contraindication)

IV Access
18G preferred, 20G minimum

Order of location preference:
Right AC
Right mid forearm
Left AC
Left mid forearm
PICC line can be used

ED Meds: for this protocol

Metoprolol 100mg po x one dose
HOLD if HR is 60bpm or lower

All other locations are unacceptable for contrast bolus delivery!
Other lines or catheters must be approved by Cardiac Imaging Team or the radiologist/resident on call.

Suggested disposition based on exam results:

1. If the CTA shows **no** significant coronary stenosis and a calcium score under 100, a cardiac etiology is very unlikely and continued evaluation of the cause of the patient's chest discomfort is at the discretion of the ED physician

2. If the CTA shows **mild to moderate** coronary stenosis or calcium score between 100 and 400, further cardiac testing may be warranted (either inpatient or outpatient) depending on the clinical situation and the patient's ability to be adequately followed.

3. If the CTA shows **significant stenosis** or calcium score greater than **400**, further testing is warranted as cardiac etiology is likely.

4. If the results of CTA are not interpretable due to technical factors, further testing, triage, and management with be at the discretion of the ED physician.

For all patients, metformin should be held for 48 hours after any CT examination