

Types of Myocardial Infarction

- **Type 1: Spontaneous myocardial infarction**
 - Due to atherosclerotic plaque rupture, ulceration, fissuring, erosion or dissection with resulting intraluminal thrombus leading to decreased myocardial blood flow or distal platelet emboli with ensuing myocyte necrosis.
- **Type 2: Myocardial infarction secondary to an oxygen supply-demand mismatch**
 - A condition other than CAD contributes to an imbalance between myocardial oxygen supply and/or demand, e.g. coronary artery spasm, anemia, respiratory failure, hypotension, sepsis, etc.
- **Type 3: Myocardial infarction resulting in death when biomarkers values are unavailable**
 - **Ex:** a patient passes in the ED before lab work can be drawn
- **Type 4a: Myocardial infarction related to percutaneous coronary intervention (PCI)**
 - Acute post-PCI troponin elevation > 5 times the 99th percentile of upper reference limit (URL)
plus one of the following:
 - Symptoms suggestive of myocardial ischemia
 - New ischemic ECG changes or new LBBB
 - Angiographic loss of patency of a major coronary artery
 - Imaging demonstration of new loss of viable myocardium or new wall motion abnormality
- **Type 4b: Myocardial infarction related to stent thrombosis**
- **Type 5: Myocardial infarction related to coronary artery bypass grafting (CABG)**
 - Acute post-CABG troponin elevation > 10 times the 99th percentile URL **plus one of the following:**
 - New Q waves or new LBBB
 - Angiographic documented new graft or new native coronary artery occlusion
 - Imaging demonstration of new loss of viable myocardium or new wall motion abnormality

*Third Universal Definition of Myocardial Infarction, Published August 2012

<http://circ.ahajournals.org/content/126/16/2020.full.pdf>