Top Ten Things To Know
Acute Myocardial Infarction in Women

1. Over the last decade in the United States, there have been marked reductions in cardiovascular disease mortality in women. However, the substantial decline in acute myocardial infarction (AMI) event rates or MI deaths is absent in young women.

2. Troubling trends of worse risk factor profiles and higher mortality among younger compared with older women persist, with continuing reports of excess in-hospital, early, and late mortality compared with men.

3. Although obstructive atherosclerotic disease of the epicardial coronary arteries remains the basic cause of AMI in both sexes, plaque characteristics differ for women, and recent data have suggested a greater role of microvascular disease in the pathophysiology of coronary events among women.

4. Autopsy studies have shown an increased prevalence of plaque erosion in women compared with men, particularly in younger women. This is of significant interest given that MI without obstructive CAD is more common at younger ages and among women.

5. Spontaneous coronary artery dissection (SCAD) is a very rare cause of AMI that occurs more frequently in women and should be suspected in any young woman who presents with an acute coronary syndrome without typical atherosclerotic risk factors. The clinical presentation of SCAD can vary among unstable angina, MI, ventricular arrhythmias, and sudden cardiac death.

6. Depression is ≈2-fold more prevalent in women than in men in the general population and is an important risk factor for incident MI or cardiac death, increasing a woman’s risk by at least 50%. Recent evidence suggests that depression in women is a powerful predictor of early-onset MI, showing a more robust association with MI and cardiac death in young and middle-aged women than in men of similar ages.

7. Risk factors such as high blood pressure and diabetes increase heart attack risk in women more severely than in men.

8. Compared with men, women are more likely to have high-risk presentations and less likely to manifest central chest pain. Pain in the upper back, arm, neck, and jaw, as well as unusual fatigue, dyspnea, indigestion, nausea/vomiting, palpitations, weakness, and a sense of dread, occur more frequently in women compared with men.

9. A number of studies have shown that women present later to treatment for AMI than men. Living alone, interpreting symptoms as nonurgent and temporary, consulting with a physician or family member, fear, and embarrassment also lead to treatment-seeking delays.

10. Compared to men, women tend to be undertreated and are less likely to participate in cardiac rehab after a heart attack. Novel strategies for secondary prevention for women, an underserved segment of CR populations, are warranted, given their adverse psychosocial profiles and poor completion rates.