

# AHA scientific statement addresses myocardial infarction in the absence of obstructive coronary artery disease

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Myocardial infarction in the absence of obstructive coronary artery disease (MINOCA) affects approximately 5% to 6% of patients with acute infarction referred for coronary angiography and requires consensus on evaluation and management, according to a new scientific statement from the American Heart Association (AHA).

Clinicians often believe that acute myocardial infarction (MI) cannot be present in patients without obstructive coronary artery disease (CAD), which is not the case, the statement said. It noted that the term MINOCA should be used only in patients who have an ischemic basis for their clinical presentation with suspected MI as defined by the Fourth Universal Definition of Myocardial Infarction. The statement authors proposed a diagnostic algorithm in which patients being evaluated for a suspected acute MI should have the following excluded: clinically overt causes of an elevated troponin level, such as sepsis or pulmonary embolism; clinically overlooked obstructive disease; and nonischemic mechanisms of myocyte injury that are clinically subtle and can mimic myocardial infarction, such as myocarditis. Once these factors have been excluded, MINOCA can be diagnosed, the statement said.

Management of MINOCA should include careful consideration of emergency supportive care, a working diagnosis for patient evaluation, cardioprotective therapies regardless of cause, and cause-targeted therapies, the statement said. Clinicians should always consider the possible causes of MINOCA and

immediately address the underlying mechanism responsible, according to the statement. MINOCA should be considered a working diagnosis so that clinicians can exclude disorders that mimic an acute MI as well as identify the underlying cause.

The statement noted that all patients with acute MI and CAD require therapies for secondary prevention, most of which target the atherothrombotic process. Because patients with MINOCA have reduced or minimal atherosclerotic burden, however, routine use of such therapies may not be of value and they should be considered on an individual basis, the statement said. MINOCA patients with any evidence of atherosclerosis should receive aggressive treatment of modifiable risk factors for CAD, the statement recommended. Therapy for MINOCA should be targeted by cause, including plaque disruption, epicardial coronary vasospasm, coronary microvascular dysfunction, coronary embolism/thrombosis, spontaneous coronary artery dissection, and supply/demand mismatch.

The statement authors noted that use of newer high-sensitivity troponin assays will probably increase the number of patients with appropriate and inappropriate diagnoses of MINOCA and emphasized that clinicians should consider a working diagnosis of MINOCA only in patients whose clinical presentation suggests a true acute MI according to the Fourth Universal Definition of Myocardial Infarction. In addition, they advocated for a MINOCA-specific ICD-10 code that would facilitate identification and tracking of patients with this condition and called for additional research to determine optimal therapy for MINOCA. “It is our hope that this newly revised definition of MINOCA and the proposed algorithm for its assessment will lead to a better understanding of the prevalence and treatment of the various conditions that result in MINOCA and to improved clinical outcomes,” the statement authors wrote. The statement was published on March 27 by .

1 Item added