

EDITOR'S PAGE



Suicide in HF Patients

A Call for Recognition

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As many of you know, I have a deep interest in the comorbidity of depression and heart failure (HF). Depression occurs in 25% of our patients with HF (1). It is not often recognized, and pharmacological treatments have been largely ineffective. Of greater concern is the risk of suicide in our patients with HF. What is that risk and what should we do? Suicide has increased annually in this country, and the World Health Organization and the National Institutes of Health have made addressing suicide a top priority. Suicide occurs in more than 1 million people annually. Fifteen percent of people with major depression commit suicide (2). Several studies have investigated this severe event in patients with HF, although the literature is not well developed. Patients with HF have a 1.5× to 2× increased risk of suicide. Risk of suicide was highest during the initial 6 months after HF diagnosis and subsequently declined gradually. Among psychiatric disorders that influenced that risk, depression and other mood disorders conferred a 7-fold increase in the risk of suicide.

When one takes a more detailed look at patients with HF, the increased risk of suicide correlates mostly with high levels of hopelessness, depression, and low self-esteem. It is believed that the ability to identify suicide ideation can be done with screening, and proper intervention can avert suicide behavior and suicide itself.

What are the risk factors for suicide, and how can we better understand this condition? Simplified scales for depression and suicide ideation have been developed, and all of us can apply these in our HF clinics. Perhaps we should screen for inpatients with a recent diagnosis of HF.

As HF cardiologists, we are always interested in potential mechanisms. Interestingly, there are

potential biological risk factors for suicide investigated over the last several decades, including the role of inflammation, cytokines, and lipid dysregulation (3). Elevated interleukin-6 levels and reduced interleukin-2 levels were observed in patients with suicide attempts. In addition, lipid dysregulation appears to play an important role. Several investigators have found that lower serum levels of total cholesterol and low-density lipoproteins have been found in patients attempting suicide compared with healthy control subjects.

Leptin, a peptide synthesized mainly in adipose tissue, is involved in a regulation of feeding and energy consumption through its action on the hypothalamus (4). Leptin plays a critical role in the regulation of stress and emotional response. There has been considerable investigation in leptin dysregulation and clinical psychopathology. Several studies have shown an association between low serum leptin levels and the risk of suicide attempt; thus, leptin may be a potential suicide biomarker that merits further investigation.

What can we do as a community of health care providers for patients with HF? Heightened awareness of suicide ideation, particularly in our depressed patients and patients who meet criteria upon screening, should be identified in the clinic. In addition, working with our mental health providers in a team-based approach with the 25% of patients who have depressive symptoms will help avoid this catastrophic event. One approach to treating depression and subsequent suicidal ideation is to optimize the HF status through the best medical therapy, device therapy, psychosocial support, and nonpharmacological therapy, and to move our patients from a state of symptomatic HF

to one with no HF symptoms. Suicide, a devastating event that has challenged our global community and has not avoided the HF patient, is increasing. Let's heighten our awareness of depression and suicide risk in our patients with HF.

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