Assessment and Treatment of Psychological Causes of Chest Pain

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KEYWORDS

• Chest pain • Coronary artery disease
• Noncardiac chest pain • Nonanginal
• Anxiety • Depression • Cognitive behavior therapy

Because it sometimes indicates acute, life-threatening events in patients with or without known heart disease, the experience of chest pain can be frightening. Chest pain prompts an estimated 4.6 million people in the United States to seek emergency medical care each year.[1] Some of these individuals receive an organic explanation for their chest pain (eg, coronary artery disease [CAD], myocardial infarction). CAD is the leading cause of death in men and women in developed nations, particularly among ethnic minorities.[2,3] Chest pain is common in CAD, particularly among patients with chronic refractory angina.[4] In contrast to patients with cardiac disease, some patients experience chest pain but are free of obstructive CAD or other cardiac causes for their chest pain. These patients are often determined to suffer from noncardiac chest pain (NCCP). At least half of all patients referred for cardiac evaluations do not have ischemic heart disease or another serious medical disorder to account for their chest symptoms.[5,6] In fact, the total economic burden of medical care for patients who are admitted with suspected ischemic symptoms but who do not sustain acute myocardial infarction has been estimated at 10 to 13 billion dollars annually.[7] In either case, organic or nonorganic, the assessment and treatment of psychological factors may be important to for the patient with chest pain.

Psychological assessment and treatment may clinically aid the patient with chest pain in ways that may influence disease onset and progression. Psychological interventions can promote behavior changes, and aid adherence and compliance with medical treatments. Treatments aimed at emotional disorders (eg, depression, anxiety) can ease the burden of pain and disease through biobehavioral pathways (ie, behavioral, pathophysiological) and help patients cope with disease-related issues. This article highlights factors important for psychological assessment and

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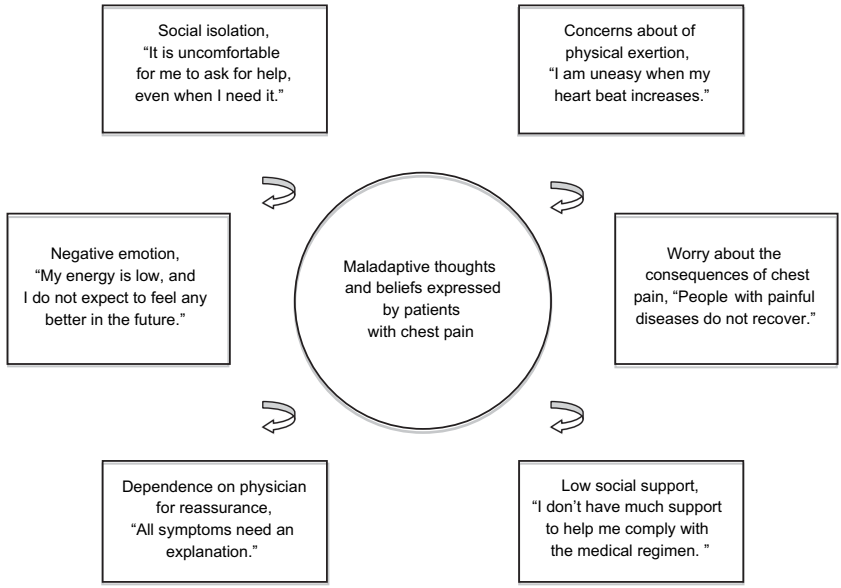

Fig. 1. Maladaptive cognitions expressed by patients with chest pain that may augment pain and emotional distress.

treatment of the chest pain patient. First, practical guidelines for an integrated cognitive, affective, and behavioral assessment are presented that include diagnostic evaluation of clinical disorders, assessment of psychological problems, and appraisal of health behaviors for primary or secondary prevention. Included in this is a discussion of the benefits of a functional behavioral analysis. Second, an overview of psychological treatments is presented, with an emphasis on empirically supported psychological treatments for the reduction of negative emotion and its association with chest pain.

PSYCHOLOGICAL ASSESSMENT

Psychological assessment with the chest pain patient involves an integration of cognitive, affective, and behavioral functioning in relation to medical health and disease. This approach is often central out of necessity. Personal medical history is often the first target of assessment partly because patients are often more at ease discussing medical history than the influence of it on their lives and their coping responses. Assessment of the patient's knowledge about their disease, their perception of the treatment regimen, and factors that have influenced their adherence and compliance are important factors to assess. Treatment nonadherence is one of the primary reasons for referral to psychologists. Treatment nonadherence is consistently poor among patients with CAD. For example, in a recent longitudinal study conducted over 7 years, almost half of the CAD patients reported that they did not consistently adhere to secondary prevention medications.[8] Discerning the cause of nonadherence may be a goal of psychological assessment. Sources of nonadherence may be financial (eg, economic hardship, poverty), cognitive (eg, memory, confusion, dementia), affective (eg, depression, anxiety), or other psychological factors (eg, denial). As a result, an account of all medications prescribed and taken including those taken without a prescription (eg, herbal, over-the-counter) is recommended. Clinicians