

Editorial

Relationship between Panic Disorder, Chest Pain and Coronary Artery Disease

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Editorial

The differential diagnosis of PD patients is very extensive, ranging from musculoskeletal diseases up to life-threatening cardiac disease. However, generally, it indicates an association with coronary artery disease (CAD). Therefore, the better conduct is searching for cardiologic attendance. When chest pain is linked to an ischemic electrocardiogram (ECG), it is highly predictive of multi-vessel CAD. In addition, its presence during exercise testing predicts CAD even in the absence of an ischemic ECG [1]. Thus, spontaneous or exercise-induced chest pain and other physiological symptoms, correspond to a crucial factor in the assessment of acute coronary syndrome, one of the main causes of death in the world [2].

This debate deals with the people presenting chest pain in the context of an anxiety disorder, in particular, during a panic attack (PA). American Psychiatric Association [3] states that PA occurs in periods of intense fear accompanied by somatic and cognitive symptoms, developed abruptly and reaching a peak within 10 min. A sub-group of symptoms, i.e., “respiratory symptoms”, with prevalence of 30-65% in PD patients [4], are probably accountable for most of the catastrophic cognition associated to PA. Choking/smothering sensations, shortness of breath, palpitation and chest pain, make patients presenting a PA very often seek emergency assistance on belief of having a heart attack. Many studies [5-9] reported cases of patients attended in emergency rooms with symptoms mimicking an acute coronary syndrome with normal coronary arteries, in which PD diagnosis was most likely. This relationship was first shown by Beitman et al. [10], which studied the prevalence of PD in 103 cardiac outpatients with chest pain, including 30 with documented CAD, finding that 57% met diagnostic criteria for PD. Basha et al. [11] also investigated the prevalence of PD in 49 patients with CAD who presented typical and atypical chest pain. They observed that 27% of the patients, all with atypical chest pain, met DSM-III criteria for PD and none with typical chest pain had diagnosis of PD. These findings suggest that PD is prevalent among patients with CAD, although more common in those with atypical chest pain. Fleet examined the prevalence of PD in 441 chest pain patients and found that among those with CAD, 34% had PD [12]. The systematic review of Lynch and Galbraith [13], involved 1,364 patients with chest pain, revealed that 30.1% of the patients had PD and approximately 26% of this population (105/411) had PD and CAD.

Although, this association between chest pain and PD has been extensively investigated in the last years there is some lack of attention to anxiety at the time of attendance by a supposed heart problem. A study performed among patients without evident CAD who sought emergency assistance complaining of chest pain showed prevalence of anxiety in more than 50% of

cases [14]. In this group, 53% were discharged only with the information they did not have an ACS. Previous reports showed indeed that only 2% to 3% of chest pain patients had a correct PD diagnosis in emergency setting [12,15]. In the studies above mentioned it is reasonably stated that people with acute chest pain may have anxiety disorders. However, more relevant is the fact that some studies have shown that anxiety disorders may coexist and even increase the risk of heart disease, but the exact pathophysiology involved in this relationship is not yet fully understood.

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