

THE IMPORTANCE OF PSYHOSOCIAL FACTORS WITH CORONARY ARTERY DISEASE

Abstract: The relationship of psychosocial factors to heart disease has been a subject of intellectual and practical interest in medicine for hundreds of years. A psychosocial factor may be defined as a measurement that potentially relates psychological phenomena to the social environment and to pathophysiological changes. In healthy populations, prospective cohort studies show a possible aetiological role for type A/hostility, depression and anxiety, social support psychosocial work characteristics. Psychosocial factors may act alone or combine in clusters. Hostility, a major attribute of the type A behavior pattern, has received considerable attention as a potential “toxic” element in this personality construct. An accumulating body of evidence also suggests multiple pathophysiological mechanisms by which hostility may be linked to coronary artery disease. Also, evidence suggests that hostile individuals are more likely to exhibit hypercortisolemia and high levels of circulating catecholamines. Cardiovascular disease frequently coexists with psychiatric disorders – depression and anxiety. Depressed individuals are more likely to develop angina, or fatal or non-fatal myocardial infarction, than their non-depressed counterparts. Depression is associated with abnormalities of platelet function, blood coagulation, immune function, the hypothalamic–pituitary–adrenocortical axis, autonomic balance, folate/homocysteine metabolism, and endothelial function, all of which may play a role in the atherosclerotic disease process. The association between anxiety and sudden death, but not myocardial infarction, suggests that ventricular arrhythmias may be the mechanism for cardiac death among individuals with anxiety disorders. Like other psychosocial factors, social support influences the extent to which individuals engage in such high-risk behaviors as smoking, fatty diet intake, and excessive alcohol consumption. In addition, social factors may exert direct pathophysiological effects, including hypercortisolemia, and increase urinary levels of epinephrine. Exactly that social factors promote atherogenesis through activation of the autonomic nervous system. Chronic work related stress appears to exert direct pathophysiological effects, including elevation of arterial blood pressure and neurohumoral arousal. The reviewed evidence suggests that each of these risk factors is associated with specific pathophysiological characteristics. The assessment of various levels of psychosocial risk factors and their pathophysiological correlates may therefore help to improve the risk stratification of patients with cardiac disease and may guide the development of future intervention strategies.