

News and Views

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NEWS

Anxiety Disorder is a Potent Risk Factor for Autonomic Dysfunction and Cardiovascular Disease

Anxiety is an integral part of life; almost everyone feels anxious now and then. Anxiety is a normal emotion when dealing with daily stressors and problems in life. But anxiety becomes a disorder when these persistent, excessive, and irrational emotions affect a person's function. Psychological problems affect people of all ages, genders, cultures, and socioeconomic status.^[1] In terms of years lived with disability (YLD), anxiety disorders were the sixth most common non-fatal cause of disability in both high- and low-income nations. The global prevalence of anxiety disorder ranged between 0.9% and 28.3%.^[2] The prevalence of anxiety disorder in the Southeast Asian region was estimated to be 23%, and in India, it was estimated to be 3.0% contributing to 2.5% of total YLD. Anxiety disorders affect more women (4.6%) than men (2.6%) worldwide.^[3]

The Autonomic Nervous System is essential for mental and physical wellbeing. The Hypothalamic-Pituitary-Adrenal axis gets dysregulated by anxiety disorders, further weakening the autonomic nervous system. As part of an anxiety disorder, repetitive, inappropriate, or chronic autonomic reactions might increase the risk of atherosclerosis, hypertension, reduced heart rate variability (HRV), myocardial infarction, or even sudden cardiac death.^[4]

An unhealthy diet, decreased physical activity, and noncompliance with medications play a significant role in linking anxiety disorders to cardiac outcomes. Inflammation, ventricular dysfunction, platelet abnormalities, and autonomic dysfunction, among other physiological processes, may contribute to cardiovascular risk factors and death.^[5]

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VIEWS

Effect of Pranayama on Cardiac Autonomic Function and Cardiovascular Risk in Anxiety Disorder

Positive emotions and social connectedness are linked to increased vagal activity, whereas anxiety disorders are linked to reduced HRV, which has severe repercussions for patients' physical health and well-being in the future, stressing the need for comprehensive cardiovascular risk reduction as they are at increased risk of arrhythmias and coronary artery disease, leading to cardiovascular mortality.

Our mind is busy with other thoughts, which might be necessary or unnecessary. Thoughts can affect perception and behavior altogether. Mind and body are interdependent and interrelated. To control one's thoughts, either one can interrupt them and replace them or vanish them out of mind. Pranayama is a breathing technique which dynamically modulates the autonomic nervous system. During slow pranayama practice, parasympathetic activity dominates sympathetic activity, causing the sympathetic tone to be withdrawn from skeletal muscle blood vessels and vascular resistance to be reduced, lowering blood pressure. Practice of slow pranayama may improve cardiac autonomic function with increased vagal tone, increased HRV, and promote cardiovascular health among individuals with anxiety disorder.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.