

Cardiovascular Disease Diagnosis and Positive Effect of Cardiokines

Phillip Cosh^{*}

Department of Cardiology, University of Bordeaux, Bordeaux, France

DESCRIPTION

Cardiovascular disease continues to be the leading cause of death worldwide, despite a clear decline in the number of deaths attributable to it over the preceding decades. Sadly, the hospitalization rate for patients under the age of 55 has not improved. A growing number of people are living with cardiovascular risk factors as a result of changing lifestyles and an ageing population, which has led to an apparent unsustainable economic burden on society. In order to get a better diagnosis, which could lead to better treatments, it is necessary to come up with new strategies. Natriuretic peptides have been found to be produced and released by cardiac myocytes. In addition to its function as an organ that beats mechanically, the heart's function as a secretory organ has come under more and more scrutiny. It is well known that neuroendocrinological evaluations have replaced investigations of cardiac hemodynamics in the quest to understand the pathogenesis of heart failure. Atrial natriuretic peptide and brain natriuretic peptide are both closely linked to the motion of the cardiac wall and enhancing signal transduction between the heart and peripheral organs, and cardiac dysfunction can significantly activate the natriuretic peptide system. It is urgent to find new therapeutic targets based on the secretory function of the heart because paracrine and autocrine signalling within the heart play a crucial physiological role in the development of cardiac diseases. A growing body of research has demonstrated that cardiac cell-secreted peptides and proteins can be classified as cardiokines. The majority of cardiokines, as significant mediators, are crucial for either preserving a healthy state of heart homeostasis or responding to myocardial damage.

Cardiokines may also play a role in protein synthesis in distant organ tissues and general metabolic processes, in addition to their physiological roles in stress response, damage repair, and myocardial remodelling. The secreted cardiokines are intended to maintain healthy cardiac function through paracrine/ autocrine pathways or affect the response of cardiomyocytes and cardiac fibroblasts to pathological abnormalities caused by heart damage or other associated inflammatory processes, ultimately evoking a protective or detrimental effect on cardiac function. Cardiokines are also differentially expressed in various physiological conditions of the heart. Numerous scientists have come to the conclusion that cardiokines may serve as biomarkers to assess cardiac function, aid in clinical diagnosis, and offer new therapeutic targets for cardiac diseases.

The positive effect of cardiokines in CVD

The cardiovascular system secretes natriuretic peptides, particularly atrial and B-type natriuretic peptides, which have a significant paracrine/autocrine effect on the occurrence and progression of cardiovascular disease. Atrial and B-type natriuretic peptides are well known for their value in the clinical diagnosis, management, and prognosis of cardiovascular disease. There is proof that atrial natriuretic peptide levels in the blood are inversely correlated with ejection fraction and that they are significantly elevated in patients with left ventricular dysfunction regardless of their clinical symptoms. It's interesting to note that elevated levels of atrial natriuretic peptide are positively correlated with the severity of congestive heart failure, whereas they significantly decline once symptoms of the condition get better.

Correspondence to: Phillip Cosh, Department of Cardiology, University of Bordeaux, Bordeaux, France, E-mail: phillosh@gmail.com Received: 03-Jan-2023, Manuscript No. CPO-23-20336; Editor assigned: 05-Jan-2023, PreQC No. CPO-23-20336 (PQ); Reviewed: 19-Jan-2023, QC No. CPO-23-20336; Revised: 27-Jan-2023, Manuscript No. CPO-23-20336 (R); Published: 03-Feb-2023, DOI: 10.35248/2329-6607.23.12.330 Citation: Cosh P (2023) Cardiovascular Disease Diagnosis and Positive Effect of Cardiokines. Cardiovasc Pharm.12:330 Copyright: © 2023 Cosh P. This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.