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Psychological Stress, Inflammation, and Coronary Heart Disease

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Abstract

Purpose of Review

In this review, we summarize evidence on the risk factor psychological stress in the context of coronary heart disease (CHD) in humans and explore the role of inflammation as a potential underlying mechanism.

Recent Findings

While chronic stress increases the risk of incident CHD and poor cardiovascular prognosis, acute emotional stress can trigger acute CHD events in vulnerable patients. Evidence supporting a potential role for inflammation as a promising biological mechanism comes from prospective human studies showing associations between chronic stress and inverse inflammation. Similarly, experimental studies demonstrate acute stress induced increases in inflammation in healthy and cardiovascular disease patients. Future research should investigate the mechanisms underlying this interesting pattern with cardiovascular disease and the well-established sequelae of events from stress to inflammation to CHD remains to be established.

Summary

Psychological stress is an independent CHD risk factor associated with increased inflammation. Although promising, causality needs to be further explored.

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Ethics declarations

Conflict of Interest

Petra H. Wirtz declares no conflict of interest.

Roland von Känel reports personal fees from Vifor AG Switzerland.

Human and Animal Rights and Informed Consent

This article reviews published studies and does not present original data with human or animal subjects performed by any of the authors.

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