

The Link between Cardiovascular Risk and Post-Traumatic Stress Disorder (PTSD)

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DESCRIPTION

Post-Traumatic Stress Disorder (PTSD) is a mental health condition that can develop after experiencing or witnessing a traumatic event. While the impact of PTSD on mental well-being is well-documented, recent research has shed light on its association with physical health, particularly cardiovascular risk. Post-traumatic stress disorder occurs as a response to a traumatic event, such as military combat, natural disasters, accidents, or assault. Individuals with PTSD may experience intrusive memories, nightmares, flashbacks, hyper vigilance, and avoidance of triggers associated with the traumatic event. The condition can significantly impair daily functioning and quality of life.

Cardiovascular risk factors

Cardiovascular risk factors encompass various modifiable and non-modifiable elements that contribute to the development of cardiovascular disease. These risk factors include hypertension, diabetes, obesity, smoking, sedentary lifestyle, family history, and age. Identifying and managing these factors are crucial for preventing heart disease and related complications.

The association between PTSD and cardiovascular risk

Recent studies have indicated a strong association between PTSD and increased cardiovascular risk. Individuals with PTSD are more likely to develop hypertension, metabolic syndrome, insulin resistance, dyslipidemia, and obesity. Furthermore, they have a higher prevalence of smoking and are less likely to engage in regular physical exercise. These factors collectively contribute to an elevated risk of cardiovascular disease and mortality among individuals with PTSD.

Chronic stress response: PTSD is characterized by dysregulated stress responses. Prolonged activation of the body's stress response system, including the hypothalamic-pituitary-adrenal axis and the sympathetic nervous system, leads to chronic elevation of stress hormones like cortisol and adrenaline. This

persistent stress response contributes to hypertension, insulin resistance, and inflammation, all of which are major cardiovascular risk factors.

Inflammation: Chronic inflammation plays a significant role in the development of cardiovascular disease. Studies have found elevated levels of inflammatory markers, such as C-reactive protein and interleukin-6, in individuals with PTSD. Inflammatory processes can damage blood vessels, promote atherosclerosis, and increase the risk of cardiovascular events.

Lifestyle factors: PTSD often leads to unhealthy lifestyle choices, including smoking, sedentary behavior, and poor dietary habits. These behaviors contribute to obesity, dyslipidemia, and insulin resistance, all of which are key contributors to cardiovascular risk.

Sleep disturbances: Sleep disturbances are common in individuals with PTSD. Chronic insomnia and nightmares disrupt the normal sleep-wake cycle and negatively impact overall health. Sleep deprivation and poor sleep quality have been linked to increased blood pressure, insulin resistance, and inflammation, all of which contribute to cardiovascular risk.

Clinical implications

The association between PTSD and cardiovascular risk has significant implications for both patients and healthcare professionals.

Early screening and intervention: Healthcare professionals should be aware of the increased cardiovascular risk in individuals with PTSD. Routine screening for cardiovascular risk factors should be incorporated into the assessment and management of PTSD patients. Early identification and intervention can help mitigate the risk and prevent the development of cardiovascular disease.

Integrated care: Given the interplay between mental health and cardiovascular health, an integrated approach to care is crucial. Collaboration between mental health professionals and cardiologists is essential to ensure comprehensive care for individuals with PTSD and cardiovascular risk factors. Treating

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both conditions simultaneously can lead to better patient outcomes and improved overall health.

Lifestyle modification: Lifestyle modification plays a vital role in reducing cardiovascular risk. Healthcare providers should emphasize the importance of the lifestyle modification.

CONCLUSION

The link between cardiovascular risk and Post-Traumatic Stress Disorder (PTSD) highlights the complex interplay between mental health and physical well-being. Individuals with PTSD

face an increased risk of developing cardiovascular disease due to various factors, including chronic stress response, inflammation, unhealthy lifestyle choices, and sleep disturbances. Recognizing and addressing these risks is crucial for both patients and healthcare professionals. By integrating cardiovascular risk assessment into the management of individuals with PTSD, healthcare providers can identify and mitigate modifiable risk factors early on. This approach requires collaboration between mental health professionals and cardiologists to provide comprehensive care that addresses both mental and physical health.