

The role of obesity excess weight affects in the development of heart disease.

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Abstract

Obesity is associated with an increased risk of Cardiovascular Disease (CVD), especially congestive Heart Failure (HF) and Coronary Artery Disease (CAD). The mechanism by which obesity increases his CVD risk involves changes in body composition, which can affect hemodynamics and alter cardiac architecture. Inflammatory cytokines produced by adipose tissue itself can cause cardiac dysfunction and promote the formation of atherosclerotic plaques. When obesity coexists with congestive heart failure or CHD, people with Class I obesity has a better prognosis than those who are normal or underweight.

Keywords: Obesity, Heart disease, Type 2 diabetes, Hypertension, Sleep apnea.

Introduction

The relationship between obesity and heart disease is well established. According to the American Heart Association, obesity increases the risk of heart disease by 20% to 30%. This is because obesity is associated with several risk factors that contribute to the development of heart disease, including high blood pressure, high cholesterol levels, and type 2 diabetes [1].

Obesity, or the excessive accumulation of body fat, has become a global health epidemic. The World Health Organization estimates that over 1.9 billion adults worldwide are overweight, with 650 million being obese. This condition not only increases the risk of various chronic diseases, including type 2 diabetes, hypertension, and some cancers, but also has a significant impact on heart health. In this article, we will explore the role of obesity in the development of heart disease [2].

One of the primary ways that obesity affects heart health is through the accumulation of visceral fat. This type of fat is stored deep inside the abdomen, surrounding vital organs such as the liver, pancreas, and intestines. Visceral fat produces hormones and other substances that can cause inflammation throughout the body, leading to insulin resistance, high blood pressure, and other cardiovascular risk factors [3].

Another way that obesity affects heart health is by increasing the workload on the heart. Excess weight puts additional strain on the heart, making it work harder to pump blood throughout the body. This can lead to an enlarged heart, which is a significant risk factor for heart failure [4].

Obesity is also linked to the development of atherosclerosis, a condition in which plaque builds up inside the arteries,

restricting blood flow to the heart. The excess fat in the body leads to the accumulation of Low-Density Lipoprotein (LDL) cholesterol, or "bad" cholesterol, which can contribute to the formation of plaque in the arteries.

Furthermore, obesity is also associated with sleep apnea, a condition in which breathing stops and starts during sleep. Sleep apnea can increase the risk of developing heart disease by putting additional stress on the cardiovascular system [5].

Conclusion

The role of obesity in the development of heart disease cannot be overstated. Excess weight increases the risk of several cardiovascular risk factors, including high blood pressure, high cholesterol, type 2 diabetes, and atherosclerosis. Reducing excess weight through a healthy diet and regular exercise can help to lower the risk of heart disease and improve overall health. It is essential to prioritize weight management as a means of reducing the risk of heart disease and other chronic conditions associated with obesity.

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