

The impact of smoking on your cardiovascular system.

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Abstract

Smoking is a major risk factor for various health problems, and cardiovascular disease is one of them. The impact of smoking on your cardiovascular system can be quite severe, leading to various complications such as heart attack, stroke, and peripheral artery disease.

Keywords: Heart disease, Smoking, Cardiovascular system, Stroke, Peripheral artery disease.

Introduction

Smoking and Heart Disease

Cigarette smoke contains over 7,000 chemicals, many of which are harmful to the body. When you inhale cigarette smoke, it goes into your lungs and then enters your bloodstream. The chemicals in the smoke can damage the lining of your blood vessels, making them more susceptible to a build-up of plaque, a sticky substance that can narrow the arteries and limit blood flow to your heart [1].

According to the 2014 Surgeon General's Report on Smoking and Health, smoking is the leading cause of cardiovascular disease (CVD) and accounts for about one in four CVD deaths. Over time, this plaque build-up can lead to atherosclerosis, a condition where the arteries become stiff and narrowed, increasing your risk of heart disease. Smoking also raises your blood pressure, putting additional strain on your heart [2].

Smoking is also a significant risk factor for stroke. Stroke occurs when blood flow to the brain is interrupted, either due to a clot or a burst blood vessel. Smoking increases the risk of blood clots by making the blood more prone to stickiness and by damaging the lining of the blood vessels.

Peripheral artery disease (PAD) is a condition where the arteries in your legs become narrowed or blocked, causing pain and cramping in your legs. Smoking is a significant risk factor for PAD, as it damages the blood vessels and reduces blood flow to the legs.

Smoking causes endothelial damage and dysfunction in both coronary and peripheral arteries. There is consistent evidence that oxidative chemicals and nicotine cause endothelial dysfunction. Exposure to secondhand smoke increases the risk of thrombosis, which is an important factor in the pathogenesis of smoking-induced cardiovascular events. Smoking induces a chronic inflammatory state that promotes atherogenic diseases and increases levels of inflammatory

biomarkers known to be strong predictors of cardiovascular events. Smoking produces an atherogenic lipid profile, mainly due to increased triglyceride levels and decreased high-density lipoprotein cholesterol levels. Smoking cessation reduces the risk of cardiovascular disease and mortality with or without coronary artery disease [3].

Quitting smoking can improve your cardiovascular health

The good news is that quitting smoking can significantly improve your cardiovascular health. When you stop smoking, your blood pressure drops, and your heart rate returns to normal. Within just a few weeks, your circulation improves, and your risk of heart disease and stroke begins to decrease [4].

Smoking damages the heart and blood vessels very quickly, but for most smokers who quit, the damage heals quickly. Even long-term smokers can notice a rapid improvement in their health when they quit smoking. Over the course of a year, the risk of a heart attack drops dramatically. Within five years, most smokers had reduced their stroke to nearly that of non-smokers. Even a few cigarettes can sometimes damage the heart, so the only proven strategy to protect the heart from the effects of smoking is to quit smoking [5].

Conclusion

Smoking has a severe impact on your cardiovascular system, increasing your risk of heart disease, stroke, and peripheral artery disease. Quitting smoking is one of the best things you can do for your cardiovascular health. If you're a smoker, talk to your doctor about quitting smoking and finding resources to help you quit for good.

References

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