

Tobacco use and cardiovascular diseases

Tobacco use, or the habit of smoking, is one of the main causes of cardiovascular disease. Approximately 30% of deaths due to heart disease in the United States are related to the habit of smoking cigarettes. There are various risk factors for heart diseases that patients can control. These include smoking, high blood pressure, high cholesterol, diabetes, obesity and lack of physical activity. When various risk factors are present, the risk increases greatly. Tobacco use, even without other risk factors, increases the risk of coronary disease. Tobacco use increases blood pressure, decreases tolerance to exercise and increases the tendency for blood clots to form. It is one of the main causes of atherosclerosis, which is the accumulation of fatty deposits on the artery walls. When plaque is formed in the coronary arteries that take nutrients and oxygen to the heart muscle, the risk of heart attack increases. Tobacco use also increases the risk of coronary disease coming back after a heart bypass ("bypass") surgery. Tobacco use increases blood pressure and heart rate. It lowers the amount of oxygen that reaches the heart. It decreases good cholesterol (HDL). It also increases the risk of blood clots. Tobacco use together with a family history of heart disease seems to increase the risk to a great extent.

Certain studies have demonstrated that smoking is a significant risk factor for stroke (cerebral infarction). This is due to damage in the blood vessels that take blood to the brain, which causes plaque to form and increases the risk of clots forming that can prevent blood from reaching parts of the brain. When this occurs, that part of the brain dies, and that causes the symptoms of stroke. Women who take contraceptive pills and smoke have a much greater risk of cerebral infarct. Tobacco use also creates a greater risk of peripheral artery disease and aortal aneurism.