

## Study on Coronary Artery Disease

Joshua C Reynolds\*

Department of Internal Medicine, University of Iowa Carver College of Medicine, Iowa City, Iowa, USA

### DESCRIPTION

Coronary Artery Disease (CAD), also known as Coronary Heart Disease (CHD), Ischemic Heart Disease (IHD), myocardial ischemia, or simply heart disease, is a condition in which blood flow to the heart muscle is reduced due to plaque build-up (atherosclerosis) in the heart's arteries. It is the most common cardiovascular disorder. Stable angina, unstable angina, myocardial infarction, and sudden cardiac death are all types of angina. Chest pain or discomfort is a typical symptom that might spread to the shoulder, arm, back, neck, or jaw. It may feel like heartburn at times. Symptoms are usually triggered by exertion or mental stress, lingers for a few minutes, and improves with rest. Shortness of breath is also a possibility, and there are times when no symptoms are present.

High blood pressure, smoking, diabetes, lack of exercise, obesity, high blood cholesterol, poor diet, depression, and excessive alcohol consumption are all risk factors. Electrocardiogram, heart stress testing, coronary computed tomographic angiography, and coronary angiogram are some of the tests that can help with diagnosis.

Eating a good diet, exercising regularly, maintaining a healthy weight, and avoiding smoking are all ways to lower your risk of coronary artery disease. Sometimes diabetes, high cholesterol, or high blood pressure medications are employed. There is little evidence to support screening patients who are at low risk and have no symptoms. Treatment entails the same preventative actions as prevention.

Antiplatelet (including aspirin), beta blockers, or nitroglycerin may be prescribed. In severe disease, procedures like Percutaneous Coronary Intervention (PCI) or Coronary Artery Bypass Surgery (CABG) may be employed. It's uncertain whether PCI or CABG, in addition to other therapies, improves life expectancy or lowers heart attack risk in those with stable CAD.

In 2015, 110 million people were impacted by CAD, which caused in 8.9 million deaths. It accounts for 15.6 percent of all fatalities worldwide, making it the leading cause of death.

Between 1980 and 2010, the chance of dying from coronary artery disease for a given age reduced, especially in industrialized countries. Between 1990 and 2010, the number of CAD cases per person of a certain age declined.

The supply of oxygen-rich blood travelling to the heart is reduced as coronary arteries narrow, which is particularly obvious during vigorous activity when the heart beats faster. Some people experience severe symptoms, while others have no symptoms at all.

The most frequent symptom is chest pain or discomfort that comes on a regular basis with activity, after eating, or at other predetermined times; this is known as stable angina and is linked to constriction of the heart's arteries. Chest tightness, heaviness, pressure, numbness, fullness, or squeezing is all symptoms of angina. Stable angina is defined as angina that changes in intensity, nature, or frequency. Myocardial infarction can be preceded by uncontrollable angina. About 30% of persons who visit the emergency room with an unknown cause of pain have pain caused by coronary artery disease. Angina, shortness of breath, sweating, nausea or vomiting, and lightheadedness are all symptoms of a heart attack, also known as a myocardial infarction, which necessitates rapid medical attention.

There are a number of well-known risk factors for coronary artery disease. High blood pressure, smoking, diabetes, inactivity, obesity, high blood cholesterol, poor diet, depression, family history, psychological stress, and excessive alcohol consumption are all examples. Genetics play a role in about half of the instances. Smoking and obesity are linked to approximately 36% and 20% of instances, respectively. Smoking just one cigarette per day nearly doubles the risk of coronary artery disease. 7%-12% of instances have been attributed to a lack of exercise. Agent Orange exposure has been linked to an increased risk of cancer. Rheumatologic illnesses such rheumatoid arthritis, systemic lupus erythematosus, psoriasis, and psoriatic arthritis are all risk factors in their own right.

\*Correspondence to: Dr. Joshua C Reynolds, Department of Internal Medicine, University of Iowa Carver College of Medicine, Iowa City, Iowa, USA; E-mail: joshuareynolds@yahoo.com

Received: December 03, 2021; Accepted: December 17, 2021; Published: December 24, 2021

Citation: Reynolds JC (2021) Study on Coronary Artery Disease. J Clin Exp Cardiol. 12: e714.

Copyright: © 2021 Reynolds JC. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.