

Myocardial Infarction

Mohd Anas Ansari*

Editorial Office, Journal of Coronary Heart Diseases, Belgium

Introduction

The myocardial ischemia is a decrease of oxygen to the heart. This decrease can happen because of many reasons. One of the main reasons is the coronary artery disease. The myocardial ischemia is an acute shortage of blood supply to the myocardium, i.e the muscle of the heart. This decreases the oxygen supply to the muscle and causes the muscle to be unable to contract.

The myocardium is the muscular tissue of the heart. It is primarily composed of cardiac muscle cells, or cardiomyocytes. The myocardium is the muscular tissue of the heart that forms the muscular walls of the chambers. The myocardium is supplied with its own blood supply which is supplied by the coronary arteries. Ischemia is a term for reduced blood flow to a tissue, which can lead to tissue death if oxygen and glucose are not provided in sufficient quantities. Ischemia can be caused by coronary artery disease, congestive heart failure, and heart attack, among other causes. Myocardial ischemia is a condition that occurs when the blood supply to the myocardium becomes insufficient to meet its demands. This inadequate blood supply can be caused by a number of conditions including coronary artery disease, inadequate blood volume, a large infarction, blood clots, vasospasm, or decreased cardiac output.

The myocardial ischemia can be acute or chronic. In acute myocardial ischemia the heart is deprived of oxygen for a short period of time. In chronic myocardial ischemia the deprivation of oxygen is for a long period of time.

There are many forms of myocardial ischemia, but the most common form is coronary artery disease. This form is typically caused by an accumulation of plaque in the coronary arteries, which reduces the flow of blood to the heart.

The incidence of myocardial ischemia is more common in women than in men, in people above 45 years old and in people with diabetes.

It is caused by narrow or reduced blood vessels, which may be due to coronary artery disease, or high blood pressure. This disease can be treated with lifestyle changes, medications, and angioplasty.

Symptoms of myocardial ischemia: chest pain, shortness of breath, nausea, dizziness, fatigue, palpitations. This disease can be treated with lifestyle changes, medications, and angioplasty.

Treatment of myocardial ischemia: blood pressure lowering, beta-blockers, calcium channel blockers, nitrates, and anti-anginal drugs.

Conclusion

Myocardial ischemia occurs when the myocardial demand for substrates exceeds that of supply. Although we often consider myocardial ischemia in the setting of critical CAD, it is clear that ischemia may occur with or without epicardial CAD. Understanding the emotional triggers, environmental and hemodynamic factors, and associated clinical conditions that may precipitate myocardial ischemia is critical for mitigating and/or treating patients with myocardial. Among patients without severe stenoses that limit resting coronary blood flow, certain factors affecting coronary flow and perfusion pressure, including shear stress-induced plaque rupture and platelet aggregation, along with changes in oxygen-carrying capacity, can result in downstream ischemia. Increasing myocardial oxygen demand through an increase in heart rate, inotropy, and wall tension further potentiate this cascade, whether this be through the action of illicit substances, physiologic states, or severe infection and sepsis. Recognition and treatment of these factors are vital in decreasing downstream myocardial ischemia by rebalancing supply and demand.

How to cite this article: Mohd Anas Ansari. "Myocardial Infarction." J Coron Heart Dis 5 (2021): 104.

*Address for Correspondence: Mohd AA, Editorial Office, Journal of Coronary Heart Diseases, Belgium, E-mail: healthcare@healthcareres.org

Copyright: © 2021 Mohd AA. 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.

Received 05 January 2020; **Accepted** 19 January 2021; **Published** 24 January 2021