Opinion
Volume 9:10, 2021

Journal of Cardiovascular Diseases & Diagnosis

ISSN: 2329-9517 Open Access

Cardiovascular Disorder (Angina Pectoris): An Overview

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Opinion

Angina pectoris, or simply angina, is persistent chest pain or discomfort. It occurs when a portion of your heart receives insufficient blood and oxygen. Coronary artery disease can cause angina, which is a symptom of the condition (CAD). This occurs when arteries that deliver blood to your heart get restricted and obstructed because of atherosclerosis or a blood clot. It can also be caused by unstable plaques, poor blood flow via a constricted heart valve, reduced heart muscle pumping performance, or a coronary artery spasm.

Angina pectoris, often known as angina, is a type of chest pain caused by a reduction in blood supply to the heart muscle. Angina is not a heart attack, although it is a symptom of a higher chance of one. Angina can be stable (occurs during physical activity, lasts five minutes or less, and is relieved by rest) or unstable (occurs during physical activity, lasts longer than five minutes, and is relieved by rest) (occurs during periods of rest, lasts longer, and symptoms may be more severe).

To diagnose your illness, your doctor may use an electrocardiogram (ECG), a stress test without imaging, or blood testing. A chest x-ray, chest CT, coronary CT angiography, cardiac MRI, coronary angiography, echocardiography, or stress test with imaging may also be conducted. In addition to other treatment choices like medication, surgery, or angioplasty and arterial stenting, your doctor may recommend certain lifestyle adjustments.

Angina pectoris, or simply angina, is a type of chest pain caused by a reduction in blood supply to the heart muscle. Because of the reduced blood flow, the heart muscle does not receive enough oxygen, resulting in chest pain. One of the most prevalent causes of angina is coronary artery disease, which causes constriction of the coronary arteries, which supply blood and oxygen to the heart muscle. While angina is not the same as a heart attack, it does indicate a higher chance of one. If you have any chest pain or discomfort, seek medical help right once.

Angina can be classified into two types: stable and unstable. The most common type of angina arises during physical exercise and lasts only a few minutes (about five minutes or less) after the activity has ceased. Unstable angina is less prevalent, and it usually happens when you're at rest. Unstable angina usually lasts longer and has more severe symptoms.

Angina symptoms

- Pain or discomfort in the chest, such as tightness in the chest
- Jaw, neck, arms, upper abdominal, shoulder, or back discomfort
- Fatigue
- Sweating
- Nausea
- Dizziness

Diagnosis of angina pectoris

The electrocardiogram (ECG) is a test that records the electrical activity of the heart and is used to diagnose heart disorders such as arrhythmias or to reveal ischemia (lack of oxygen and blood) in the heart.

Without imaging, perform a stress test. This heart-monitoring test is designed to assess how well the heart performs during physical activity. Typically, during a stress test, you will be asked to engage in physical activity, such as walking on a treadmill. During the exercise session, an ECG is taken. Your doctor examines the ECG to see if your heart rate is normal and if there are any abnormalities that indicate decreased blood supply to your heart. Pharmaceuticals that mimic the heart's response to exercise may be used if you are unable to exercise.

Blood testing: These tests can detect specific enzymes, such as troponin, that escape into the bloodstream after a heart attack or severe angina. Elevated cholesterol, LDL, and triglycerides can be detected by blood testing, putting you at a higher risk for coronary artery disease and, as a result, angina.

Additionally, the following imaging tests may be performed:

X- Ray: A chest x-ray is a non-invasive imaging test that can help your doctor rule out other causes of chest pain, such as pneumonia. To create images of the chest and heart, x-ray imaging involves exposing the chest to a modest dosage of radiation. For additional information on x-rays, go to the Safety page.

Chest CT: A more sensitive test than a chest x-ray, a chest CT can detect various causes of chest pain, such as aortic illness or blood clots in the lungs' blood arteries. This imaging test combines advanced computers with specialised x-ray equipment to obtain numerous images of the chest and heart. For additional information on x-rays, go to the Safety page.

Coronary computed tomography (CT) angiography: This test assesses the coronary arteries (blood vessels that provide blood and oxygen to the heart) to identify the extent of plaque narrowing without the requirement for an invasive catheter to be inserted into the arteries and into the heart. A tiny line in the arm vein, similar to the ones used to take blood, is used to inject contrast material.

Magnetic resonance imaging (MRI): The basic goal of magnetic resonance imaging (MR imaging) is to detect whether or not there is adequate blood flow to the heart muscle. This could indicate plaque with blood vessel narrowing if there are places with lower blood flow. With the addition of contrast material, this blood flow evaluation can be done twice during the exam. The first time may be done after taking a drug that strains the heart in the same way as exercise does. The second time will be spent at a standstill. Performing the evaluation under stress and at rest allows you to see if the reduced blood flow is caused solely by exercise. This test can also be used to evaluate heart function and see if the heart muscle has any scarring.

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Received 05 October 2021; **Accepted** 19 October 2021; **Published** 26 October 2021

How to cite this article: Rouault, Gilles. "Cardiovascular Disorder (Angina Pectoris): An Overview." J Cardiovasc Dis Diagn 9 (2021): 480.