Visualizing and Predicting Heart Diseases with an Interactive Dash Board

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Effect Of Existing Heart Disease On Average Of Exercise Angina

Angina (pronounced ANN-juh-nuh or ann-JIE-nuh) is pain in the chest that comes on with exercise, stress, or other things that make the heart work harder. It is an extremely common symptom of which is caused by cholesterol-clogged coronary arteries. This is the network of arteries that nourish the heart muscle.

Symptoms

Angina tends to appear during physical activity, emotional stress, or exposure to cold temperatures, or after big meals. Symptoms of angina include:

- pressure, aching, or burning in the middle of the chest
- pressure, aching, or burning in the neck, jaw, and shoulders (usually the left shoulder) and even down the arm
- a sense of anxiety or uneasiness

The pain of angina usually isn't sharp. Instead, it is more a sense of pressure or squeezing. Sometimes it is just an uncomfortable sensation, not really a pain. Angina is not affected by the position of your body or

by taking a deep breath, while other causes of chest pain, such as pleurisy or pericarditis, often are.

Diagnosing angina

Your doctor can suspect a diagnosis of angina based on your description of your symptoms, when they appear and your risk factors for coronary artery disease.

Your doctor will likely first do an electrocardiogram (ECG) to help determine what additional testing is needed to confirm the diagnosis.

Treatment for angina

Treatment for angina depends on how severe it is, whether it has recently become more severe (even if it is still mild), how much it interferes with your life, and your expectations and goals. Lifestyle changes are sometimes enough to make angina go away, though most people need one or more medications to ease or prevent angina. Some people need a procedure to open or bypass blocked coronary arteries.

Lifestyle changes for angina

Some of the following may help ease angina:

Reduce risk factors. Stopping smoking, losing weight if needed, and lowering high blood pressure, high cholesterol, and high blood sugar can help control angina.

Adjust your daily activities. If certain kinds of activity regularly cause angina, try performing the activity more slowly. Your heart is under

more stress in the mornings and after meals, so try reducing physical activity at those times.

Reduce stress and anger. If anger and stress regularly bring on your angina, a stress-reduction program or meditation can help.

Exercise. Even though exercise can bring on angina, a supervised program of exercise can safely strengthen the heart and eventually reduce angina. Start slowly, and gradually build up your level of exercise during optimal times of the day. Your physician can tell you what you can and cannot do.

Heart-healthy eating. Adopting a Mediterranean or other heart-healthy eating strategy can help fight the cholesterol-filled plaque that is responsible for angina.

Medications for angina

Medication also plays an important role in treatment. Several types of medication are to ease or prevent angina. These include:

- nitrates
- beta blockers
- calcium-channel blockers
- aspirin
- statins
- ACE inhibitors
- ranolazine

Nitrates cause the coronary arteries to widen, increasing blood flow through the coronary arteries. They come in several forms. One kind (nitroglycerin) is a pill that you place under your tongue when you first feel pain or discomfort. It should relieve angina within 5 minutes. Long-acting nitrates, taken every day by pill or patch, help prevent angina attacks.

Beta blockers slow the heart rate so the heart doesn't have to work so hard. They reduce the risk of abnormal heart rhythms and lower blood pressure.