Interventional Cardiology

What leads to coronary heart disease?

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Abstract:

Coronary heart disease (CHD), or coronary artery disease, develops while the coronary arteries emerge as too narrow. The coronary arteries are the blood vessels that deliver oxygen and blood to the coronary heart. CHD tends to develop when cholesterol builds up on the artery walls, creating plaques. Due to CHD there is a reduction of blood flow to the heart muscle due to build-up of plaque (atherosclerosis) in the arteries of the heart. It is one of the most common cardiovascular diseases. A common symptom is chest pain or discomfort which may travel into the shoulder, arm, back, neck, or jaw. It may leads to heart attack if the flow of oxygen-rich blood to a section of heart muscle is cut off. This can happen if an area of plaque in a coronary artery ruptures (breaks open). The most common signs and symptoms of heart failure are shortness of breath or trouble breathing; fatigue; and swelling in the ankles, feet, legs, stomach, and veins in the neck. All of these symptoms are the result of fluid build-up in your body. When symptoms start, you may feel tired and short of breath after routine physical effort, like climbing stairs.

What are risk factors for Coronary heart disease?

Coronary artery disease has a number of risk factors these includes excessive blood pressure, smoking, diabetes, loss of exercise, obesity, excessive blood cholesterol, terrible diet, depression, own circle of relatives history, and excessive alcohol. The heritability of coronary artery disease has been estimated between 40% and 60% [1].

What are the ways to reduce the coronary artery disease?

Ways to reduce CAD risk include eating a healthy diet, regularly exercising, maintaining a healthy weight, and not smoking. Medications for diabetes, high cholesterol, or high blood pressure are sometimes used [2].

Diagnosis of Coronary Heart Disease (CHD):

Stable angina

In "stable" angina, chest ache with regular capabilities going on at predictable ranges of exertion, various forms of cardiac pressure tests can be used to result in each signs and symptoms and hit upon adjustments with the aid of using manner of electrocardiography (the use of an ECG), echocardiography (the use of ultrasound of the coronary heart) or scintigraphy (the use of uptake of radionuclide with the aid of using the coronary heart muscle).

Acute Coronary Syndrome (ACS)

Diagnosis of acute coronary syndrome generally takes place in the emergency department, where ECGs may be performed sequentially to identify "evolving changes" (indicating ongoing damage to the heart muscle). Diagnosis is clear-cut if ECGs show elevation of the "ST segment", which in the context of severe typical chest pain is strongly indicative of an acute Myocardial Infarction (MI); this is termed a STEMI (ST-elevation MI) and is treated as an emergency with either urgent coronary

angiography and percutaneous coronary intervention (angioplasty with or without stent insertion) or with thrombolysis ("clot buster" medication), whichever is available.

How to prevent coronary heart disease?

Studies show that heart-healthy living-never smoking, eating healthy, and being physically active-throughout life can prevent coronary heart disease and its complications. Work with your doctor to set up a plan that works for you based on your lifestyle, your home and neighborhood environments, and your culture. Working with a team of healthcare providers may help with making changes in your diet, being physically active, managing other medical conditions, and helping you quit smoking.

References

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