EDITORIAL

Medical tests for heart disease

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DESCRIPTION

In United States heart disease is the leading cause of death (about 1 in 4 deaths). Heart disease refers to several types of heart conditions. The most common type is Coronary Heart disease (CAD), which can lead to heart attack. In some cases heart disease may be "silent" and not diagnosed until a patient experiences signs or symptoms of a heart attack heart failure, or an arrhythmia. If these events happen, signs and symptoms include: Heart attack which includes chest pain or discomfort upper back or neck pain, indigestion, heartburn, nausea or vomiting, extreme fatigue, upper body discomfort, dizziness, and shortness of breath, arrhythmia causes fluttering feelings in the chest called palpitations and heart failure where patient's experiences Shortness Of Breath (SOB), fatigue, or swelling of the feet, ankles, legs, abdomen, or neck veins. Diabetes, obesity, unhealthy diet, physical inactivity and over intake of alcohol are known to be the some of the risk factors for heart disease. Depending upon the patient's symptoms, risk factors, and medical history doctor would advise which medical test is needed to diagnose one's heart disease. The most common medical tests performed for diagnosis of a heart condition are angiogram, blood tests, blood pressure monitoring, chest x-ray, echocardiogram, ElectroCardioGram (ECG), electrophysiology studies, Magnetic Resonance Imaging (MRI), stress tests, and tilt tests.

Angiogram

Coronary angiogram: This diagnostic test may be done during or after a heart attack or angina. Sometimes it is known to be as 'cardiac catheterization'. Here a small tube called catheter is put into an artery in patient's groin, arm or wrist region under local anesthetic. This catheter is moved up inside the artery until it reaches your heart. An Xray is taken before which a special dye is injected into a patient's coronary arteries. This procedure may make a patient to feel hot and flushed for a few seconds. This X-ray which depicts about the where and how much coronary arteries are narrowed and also regarding the activity of heart in pumping of blood. This test is known to be provided a best treatment for cardiac patients.

Coronary Computed Tomography Angiogram (CCTA): It is a type of Computed Tomography (CT) scan that can help diagnose coronary artery disease and gives a 3-dimensional image of the heart chambers and coronary arteries supplying blood to the heart. It is known to be a non-invasive test for people who may be experiencing unusual cardiac symptoms.

Blood tests

Blood tests can measure the levels of these substances which are being released when a patient's heart muscle has been damaged, as in a heart attack; body releases substances in the blood. It is known to be as most common test after a heart attack checks levels of troponin in blood.

Blood pressure monitoring

Doctor may arrange to wear light-weight blood pressure monitor for 24 hours to get accurate information about Blood pressure.

Chest x-ray

Using an x-ray can show if there are signs of heart failure.

Echocardiogram

It is most common type of test. Picture of heart can be provided using ultrasound. These types of test are performed to check if there are any problems in heart valves, chambers and performed before and after exercise is also used to detect areas of the heart where the blood supply through the coronary arteries to the heart muscle is reduced.

Electro Cardio Gram (ECG)

This type of medical tests reads heart's electrical impulse. Here a small sticky dots and wire leads are put on patient's chest, arms and legs. Leads are attached to can an ECG machine which records the electrical impulses and prints them out on paper.

Electrophysiology studies

It uses a computer to help find out about an abnormal heartbeat (arrhythmia). Here Special tubes (catheters) are inserted, via a vein in your leg, into patient's heart and these catheters record the heart's electrical activity and test its response to various stimuli.

Stress tests and MRI

Exercise stress test, stress echocardiogram (stress echo), and nuclear cardiac stress test are used to test for performance of heart's function when a patient is physically active, using exercise machines (e.g. a treadmill).

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