Heart Attack vs Cardiac Arrest

Heart attack and cardiac arrest- these two terms often used interchangeably, and therefore often there is confusion about them. Heart attack and cardiac arrest are not the same thing. Every year in the United States about 720,000 adults sustain a first heart attack and 335,000 have a second or third heart attack . Fortunately, the incidence of cardiac arrest is much lower.

Only 9.3% of people who had a cardiac arrest outside the hospital setting survive. It is important to know the correct signs and symptoms of each, and how to respond promptly. The faster these events are treated, the greater the likelihood the individual will recover with minimal or no loss of function.

HEART ATTACK: A heart attack is a circulatory problem that happens when a coronary artery is blocked by a clot and prevents blood flow to part of the heart muscle. If the artery isn't reopened quickly to restore the blood flow, the heart cells supplied by that artery start to die.

Symptoms include discomfort in the center of the chest or other part of the upper body, breathlessness, sweating, and nausea. But the heart continues to beat and person remains awake most of the time.

WHAT SHOULD YOU DO: If you suspect someone is having a heart attack, call 911 immediately. If aspirin is available, give the person a 325 mg of aspirin to CHEW. This aspirin which is an anti-platelet Agent is sometimes sufficient to begin to break up the clot and restore blood flow. Please do not wait to see if symptoms will subside and do not drive the patient to the hospital.

Wait for the ambulance to arrive. Emergency personnel will assist the patient en route. Importantly they will call ahead so that heart team will begin treatment immediately upon arrival in the emergency room

CARDIAC ARREST: Cardiac arrest results from failure of the heart's electrical system. During cardiac arrest heart abruptly and unexpectedly stops beating. Heart pumps because special electrical cells signal the upper and lower chambers of the heart to contract synchronously.

During Cardiac arrest, an electrical misfire, cause the hearts lower chamber called ventricle to flutter or quiver, causing what is known as ventricular fibrillation. With no blood delivered to the brain and other organs, the person loses consciousness and drops to the ground.

Unless immediate intervention is done, the person will suffer what is known as SUDDEN CARDIAC DEATH .During a cardiac arrest, the person will have no pulse and stops breathing . Other symptoms can include irregular, or gasping or choking sounds known as agonal breathing. Sometimes, a heart attack can trigger cardiac arrest. First hour after the heart attack is the most crucial period.

During this period, there is electrical instability in the heart, causing ventricular fibrillation. Scar tissue from a heart attack can also damage the heart, leaving it, unable to pump effectively. Weakend heart is more prone for ventricular fibrillation. Because cardiac arrest is so closely tied to coronary artery disease, the underlying risk factors are largely the same.

This include smoking, diabetes, high blood pressure, high cholesterol, physical inactivity, obesity, and family history of early coronary artery disease. Other heart conditions that can predispose people to have a cardiac arrest include weak heart muscle called cardiomyopathy, heart valve problems, and also inherited conditions that affect the hearts electrical system.

Some of these conditions affect young people. These include Long QT Syndrome, abnormality in the Rt Lower chamber of the heart called Right Ventricular Dysplasia and also abnormal thickens of heart muscle, called Hypertrophic Cardiomyopathy. We hear young athletes dying suddenly, and sometimes this could be related to one of the inherited conditions.

Some drug use increases the risk of cardiac arrest, particularly using drug such as cocaine or amphetamines or overdosing on opioids or other pain medications.

The risk of cardiac arrest increases slightly during and for up to 30 minutes after strenuous exercise, especially in people who are out of shape. But the odds are estimated to be one in 1.5 million during any exercise episode, which is far outweighed by the overall heart protection, benefits of exercise.

WHAT SHOULD A BYSTANDER DO DURING CARDIAC ARREST: An automatic, external defibrillator called AED will be necessary to restore the heart rhythm. In the meantime, CPR should be performed without delay and without interruption to keep oxygenated blood flowing to vital organs. One person should begin chest compression at the rate of 100 to 120 bpm, while someone else calls 911 and look for an AED.

CPR should not stop until Emergency Medical personnel arrive or an AED can be used to shock the heart back to life.

IT IS A GOOD IDEA FOR ALL OF YOU LEARN PROPER CPR TECHNIQUES.

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