SCA and Heart Attack - Understanding the Difference

It’s a common misconception that sudden cardiac arrest (SCA) and heart attack are the same thing. In reality, they are quite different. Understanding the difference could save your life - or the life of someone you love.

**SCA and Heart Attack: Understanding the Difference**

SCA is different from heart attack. While heart attack is described as a “plumbing problem,” SCA is more of an “electrical problem” that prevents the heart from functioning effectively. Heart attack can lead to SCA, but there are many other causes, such as congenital abnormalities, severe heart failure, electrocution and drug overdose.

**Signs and Symptoms of SCA**
When SCA occurs, the heart stops beating altogether. As a result, blood no longer is pumped throughout the body, including the brain. The person suddenly passes out, loses consciousness, and appears lifeless - except for abnormal “gasping” which may last for several minutes. Occasionally, SCA victims will experience 10-20 seconds of seizure activity (shaking of the arms and legs) at the onset of the event as the brain stops receiving blood and oxygen from the heart. The SCA victim is never awake and needs immediate help. If nothing is done, the victim will die within minutes.

**Lifesaving Actions**
When SCA occurs, it is critically important that whoever is near the victim calls 999 immediately, checks for signs of life, and if there are none, gives cardiopulmonary resuscitation (CPR) and uses the nearest automated external defibrillator (AED). This is lifesaving care that any layperson can provide. It is best to be trained in CPR and the use of AEDs, but even without formal training, the rescuer can push hard and fast on the victim’s chest and follow the directions on the AED, while waiting for emergency services to arrive.

**How You Can Save a Life: Sudden Cardiac Arrest**

**What to do:**
- Call 999 immediately
- Give CPR or at the very least chest compressions
- Use AED

**What NOT to do:**
The worst thing for an SCA victim is to do nothing. Sometimes people hesitate to help because they are afraid they might do the wrong thing and hurt the victim. But the SCA victim is clinically dead and cannot get worse. Your actions can only help.

**The Chain of Survival**

**SCA and Heart Attack: Understanding the Difference**

Heart attack (the medical term is myocardial infarction or MI) occurs when part of the heart’s blood supply is reduced or blocked, causing the heart muscle to become injured or die. The person is awake (conscious) and may complain of one or more of the signs and symptoms of heart attack.

**Signs and Symptoms of Heart Attack**
Most heart attacks involve discomfort in the center of the chest that lasts more than a few minutes or that goes away and comes back. Some heart attack victims experience mild intermittent chest discomfort that comes and goes over a period of days. These are early “warning signs” that may precede a heart attack. (Some victims, however, do not experience any warning signs.) Chest discomfort can feel like uncomfortable pressure, squeezing or fullness. It can evolve into crushing pain if nothing is done.

**Other symptoms of heart attack include:**

- Shortness of breath
- A general sense of anxiety
- Nausea, sweating, lightheadedness
- A tendency to deny that anything serious is happening
- Pain or discomfort in one or both arms, spreading to the shoulder, upper back, neck or jaw
- A tendency to deny that anything serious is happening

It’s important to act right away if these symptoms occur to maximize the odds of survival and minimise potential permanent damage to the heart.

**Signs and Symptoms of Heart Attack in Women**
The most common symptom of heart attack in women is the same as it is for men: chest discomfort or pain. Women are more likely than men, however, to experience other common symptoms such as:

- Shortness of breath
- Cold, sweaty skin, paleness
- Fainting, nausea, vomiting
- Back or jaw pain

**Sometimes women experience additional symptoms including:**

- Stomach or abdominal pain
- Weakness and/or overwhelming fatigue
- Swelling of the ankles and/or lower legs

**Lifesaving Actions**
When someone experiences a heart attack, he or she is awake and the heart is beating. There is no need to give CPR or to use an AED. Instead, the correct action is to call 999 immediately to get emergency services on the way to help. The sooner the person is treated, the better the outcome.

**How You Can Save a Life: Heart Attack**

**What to do:**
- Call 999 immediately
- Have the person rest or lie down while waiting for emergency services

**What not to do:**
- Refrain from driving the person experiencing symptoms of heart attack to the hospital. The only rare exception might be when the hospital is very close by and you expect emergency services to be delayed significantly in getting an ambulance to the scene.
- Never drive yourself to the hospital if you are experiencing heart attack symptoms.
- Do not delay more than five minutes from the onset of symptoms to call 999.
- Do not hesitate to call 999 because you are embarrassed or don’t want to bother anyone. Emergency services are there for you and, it is better to be safe than sorry.