

## CARDIOLOGY

# Heart attack versus heart failure

What is the difference between these two conditions? Learn about their definitions, symptoms and treatment options.



**Dr Eric Hong**  
Cardiologist

**EH Heart Specialist Pte Ltd**  
3 Mount Elizabeth  
#03-09 Mount Elizabeth Medical Centre  
Singapore 228510  
Tel: 6736 1068  
www.eheartspecialist.com

Heart failure is often confused with heart attack. While both have similar causes, there are differences between the two conditions.

### Heart attack

**What it is:** When the arterial passages to the heart become clogged by plaque, blood flow to the heart is restricted. If a clot develops and blood flow is completely stopped, a heart attack occurs.

**Symptoms:** They can differ among individuals, and between men and women. But the common signs are:

- A feeling of being squeezed or sensation of strong pressure in the chest
- Pain that travels from the chest to the left arm
- Pain in the jaw
- A feeling of being choked, accompanied by breathlessness
- Nausea or vomiting, light-headedness, extreme fatigue, and pressure in the upper back with or without chest pain (more common among women)

**Treatment:** An emergency coronary angioplasty may be done to open blocked arteries. A balloon-tipped catheter is inserted through a blood vessel leading to the affected artery to widen it. Angioplasty is often combined with a stent, a small wire mesh tube that pushes plaque against the arterial wall to prevent small plaques from breaking off (which can lead to future heart attacks) and the artery from narrowing again.

Coronary artery bypass surgery (CABG) may be recommended when the left main artery is severely narrowed, all three main coronary arteries are blocked, or there is more than one diseased coronary artery and the heart's main pumping chamber does not function well.

During CABG, a healthy blood vessel is taken from the leg, wrist or chest, and attached above and below the blocked artery, allowing blood to bypass the area.

In recent years, less-invasive techniques such as off-pump surgery, keyhole surgery and endoscopic vein and radial artery harvesting have also become available.

### Heart failure

**What it is:** While a heart attack happens suddenly, heart failure is a chronic condition that gradually worsens. The heart muscle weakens and becomes unable to pump blood efficiently throughout the body. Heart attacks can weaken the heart's pumping ability, which leads to heart failure. Sometimes, heart failure comes on suddenly after a heart attack.

### Symptoms:

- Shortness of breath, especially when lying down
- Wheezing or coughing
- Fast or irregular heartbeat
- Tiredness
- Swelling around the ankles, legs, or stomach, and weight gain from fluid retention
- Confusion

**Treatment:** Medications to lower blood pressure or to slow the heart rate are common. Diuretic pills may be prescribed to remove excess water, which then eases swelling or shortness of breath.

As heart failure worsens, a pacemaker or defibrillator may be inserted to keep the heart pumping in rhythm or to steady heartbeat respectively. Those with advanced heart failure may need a pump to keep their heart working. In severe cases, a heart transplant may be considered. [🔗](#)

