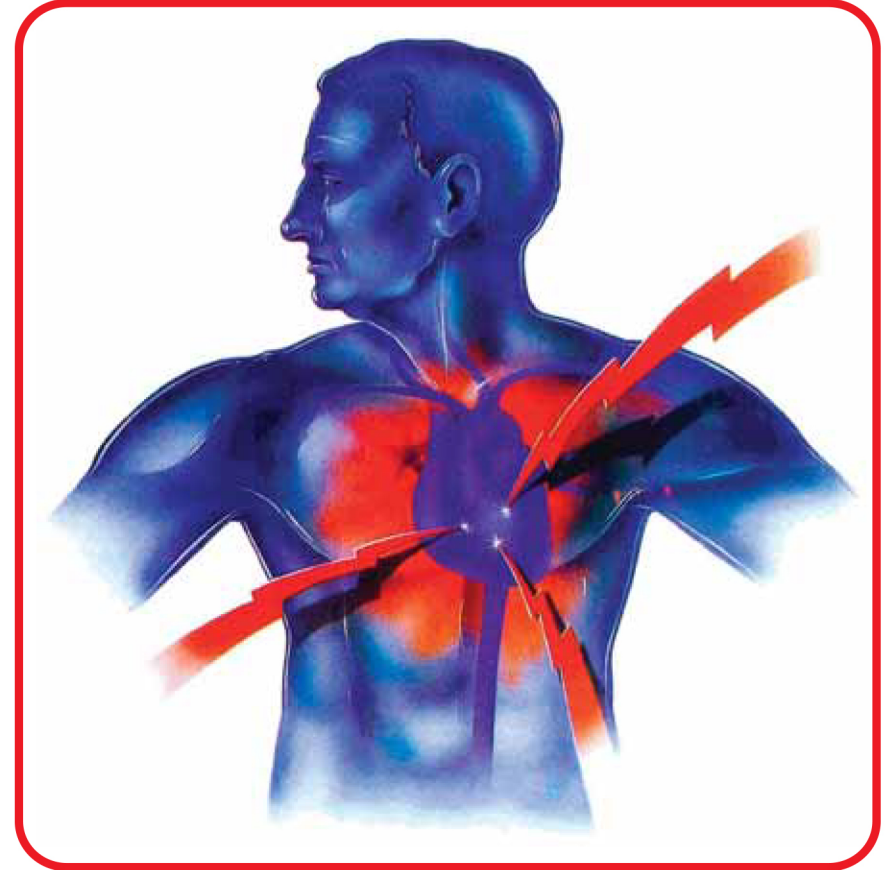


HEART ATTACK



For more information please contact:

Section of Cardiology

Aga Khan University Hospital, Karachi
Nazerali-Walji Building, First Floor,
P.O. Box 3500, Stadium Road,
Karachi-74800, Pakistan
Tel: 021 3486 4761. 3493 0051
Fax: 021 3493 2095
Email: cardiology@aku.edu
www.hospitals.aku.edu/karachi

May 2014 ICN #



آغا خان یونیورسٹی ہسپتال، کراچی

The Aga Khan University Hospital, Karachi

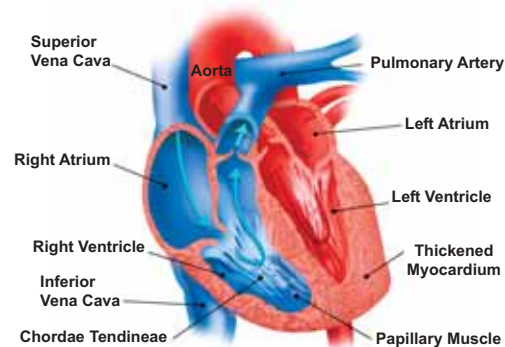


Heart Attack

A heart attack can occur anytime - at work or play, while you are resting or in the middle of a strenuous workout. Heart attacks occur very suddenly, but the stage is set for them over many years. In fact, coronary heart disease causes more premature deaths than any other disease known to mankind. The heart attack or myocardial infarction is the most common serious illness, suffered by men and women not only in the developed world, but also in the developing world.

The Heart and Coronary Arteries

The Heart is an organ about the size of your fist which lies in the chest and is made up of specialized muscles. Like all muscles, the heart requires a good blood supply. The coronary arteries arise from the aorta and supply the muscle of heart by dividing into smaller branches.



What is a Heart Attack ?

A heart attack is the stopping of blood flow to a part of the heart muscle. This usually occurs even without typical chest pain, women may complain of shortness of breath, pressure or pain in upper abdomen, or lower chest, upper back pain as part of heart attack symptoms.

The second is a sudden and abrupt blockage of the artery due to the development of a blood clot in the narrowed artery. The result is a sudden cut off in the nutrients and oxygen supply to the heart muscle. The tissue therefore gets damaged and the heart muscle is replaced by scar tissue. Luckily, the heart has considerable reserve capacity as a pump, so a small amount of damage may not interfere with the ability of the heart to pump reasonable amount of blood around the body. Thus a patient can often recover well and return to a fairly normal life if timely diagnosed and treated.

Rare causes of heart attacks are inflammation of coronary arteries, spasm of arteries, and blood clot from a heart chamber or a trauma to the heart.

Who is likely to have a Heart Attack?

- 1) Smokers
- 2) Diabetics
- 3) People with High Blood Pressure
- 4) People with high Cholesterol
- 5) Overweight and Obese people and those with inactive lifestyles
- 6) People who have a family history of heart disease in men <55 years or women <65 years of age.
- 7) Previous history of coronary artery disease.

What are the Symptoms of a Heart Attack?

Heart attack is an urgent message from your heart that it is starved for oxygen and part of the muscle is starting to die. This lack of oxygen causes a variety of symptoms and they may not be felt as pain. Typically, rest and nitroglycerine give incomplete, temporary or no relief at all.

Chest Discomfort

This feeling of pressure, squeezing, pain, fullness or burning discomfort in the center of the chest may radiate to the shoulders, neck, jaw, arms or back. This is the most typical presentation.



Sweating

The combination of a profuse, cold sweat on the upper body, dizziness, shortness of breath and nausea often tells you that you are having a heart attack. Nausea and vomiting may also occur along with chest discomfort.



Shortness of Breath

Some people describe this symptom as tightness like a rope around the chest. It is caused by the inability of the heart to pump properly.



Weakness

You may feel weak or dizzy, especially when you stand up. The feeling is often accompanied by one or more of the other symptoms. You may also faint.



A brief, stabbing pain or pain that is worsened by bending or twisting or taking a deep breath usually is not a heart attack.

The above mentioned symptoms occur in about 65% of all patients. In roughly 10-15% of patients, there are absolutely no symptoms during a heart attack. This is termed as Silent Myocardial Infarction.

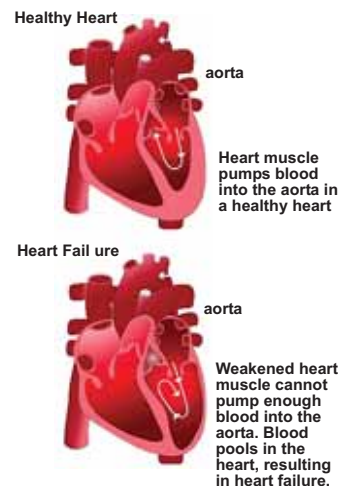
What Should be Done if a Heart Attack Occurs?

Heart Attack is a medical emergency. It is one of the most serious threats to life worldwide. The first priority treatment for most patients, is the relief from pain and to get timely diagnosis and treatment. The use of clot dissolving treatment (thrombolytic therapy) or balloon angioplasty and stenting (PCI) in early hours after the heart attack with sophisticated nursing care in a high dependency area (Coronary Care unit-CCU), the early and late complications of heart attack can be significantly reduced.

Lives' threatening cardiac rhythm disorders occurs within a span of the first few hours and are readily amenable to electrical treatment. Therefore, the need to rush to a hospital with a 24-hour cardiac care facility is even more important nowadays. Limiting the size of heart damage by using thrombolytic agents(drugs like streptokinase and tPA) or balloon angioplasty with stents within the first few hours of the heart attack has made a major difference to survival of patients in recent years.

Time Equals Heart muscle

During a heart attack, the reduced blood flow (ischemia) caused by a blood clot, results in damage to the heart muscle. The muscle begins to die in a spreading formation within the area of ischemia, limiting the heart's ability to pump. Your goal is to get to the hospital during the "golden hour" to keep permanent damage down to a minimum. Your doctor's goal is to stabilize your condition and allow blood to flow again to the starved heart muscle. Another goal is to support the heart function and rhythm with medications and sometimes by mechanical devices such as temporary pacemakers, intra-aortic balloon pump and mechanical ventilation.



Arriving at the Hospital

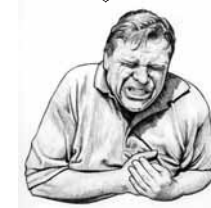
If you get to the hospital within the "golden hour," your chances for a full recovery greatly improve. Your doctor will decide on the best way to treat your heart attack and relieve your symptoms.

Tell Them, "I Think I'm having a Heart Attack"

When you arrive at the hospital, tell them you think you're having a heart attack, so you will get immediate attention. You may be given medications to relieve pain, stabilise your heart rhythm, improve your breathing and lower your blood pressure. If it is not a heart attack, you will for your discomfort.



"Nurse ... I'm having a heart attack!"



Recovering in the Hospital

The time required for recovery depends on:

- ♥ The extent of myocardial damage
- ♥ The rate of healing
- ♥ The presence of complications;
- ♥ The preparedness of the patient to adjust lifestyle habits for risk I modification.

Expect to be hospitalized for up to one week (less for uncomplicated cases) who may go home in 3-4 days) weeks to evaluate the damage, help you rest while your heart heals, and treat any complications. You will have blood tests, ECGs (electrocardiograms) and possibly a stress test. Based on the results of these tests and your symptoms, your doctor may recommend angiography, angioplasty or surgery. Often, however, medications will be enough for proper treatment.



Once the initial few days are over without complications, further problems are less frequent with the passage of time. The risk of recurrence of myocardial infarction is greatly diminished by adopting healthy habits and taking medicines, such as Aspirin Beta-blockers - the secondary prevention of myocardial infarction.

Road to Recovery

The final responsibility for heart attack lies with you. Only you can make your lifestyle change-changes in eating, smoking and exercise habits that will help protect against cardiovascular diseases. A little prevention can



have a big payoff - a longer, healthier, more active life. Your doctor will discuss this further with you when he sees you in the follow-up clinic.

Heart -Healthy Lifestyle

Healthy lifestyle measures are important preventive measures in the fight against cardiovascular disease. These include:

- ♥ No smoking;
- ♥ Regular exercise (walking, cycling, etc.) -
- ♥ Initially this could be done in a supervised setting - Cardiac Rehabilitation;
- ♥ Avoiding foods high in fat content and cholesterol; Increasing fruit and vegetable intake.
- ♥ Regular medical check-ups and taking medicines reg&agr prescribed
- ♥ Having a balanced lifestyle between work, play (fun, social activities) rest and relaxation

