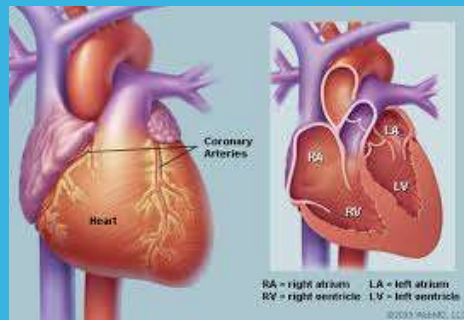


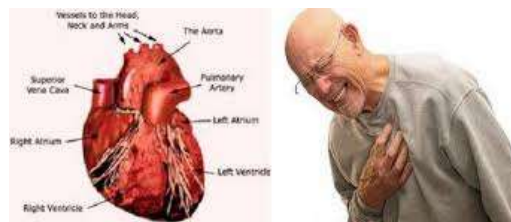
ACS ASSESSMENT

PREPARED BY: AHMED HAMED



ACS:

Acute coronary syndrome (ACS) is a severe and sudden heart condition that, although needing aggressive treatment,



ACS INCLUDE:

ACS is an umbrella term encompassing the following clinical disorders:

STEMI

NSTEMI

UA

ASSESSMENT

Include:



RISK FACTORS

Cigarette smoking. This is one of the biggest factors associated with heart disease.

Age. Men are at risk starting at about age 45; women are at risk at age 55.

Gender. At middle age, coronary artery disease and heart attacks are much more common in men. Women have, on average, 10 to 15 more years of heart disease-free life than do men. But, as women age, their level of risk reaches that of men.

High blood pressure. A normal blood pressure reading is below 120/80. If yours is above that, your risk of heart disease increases.

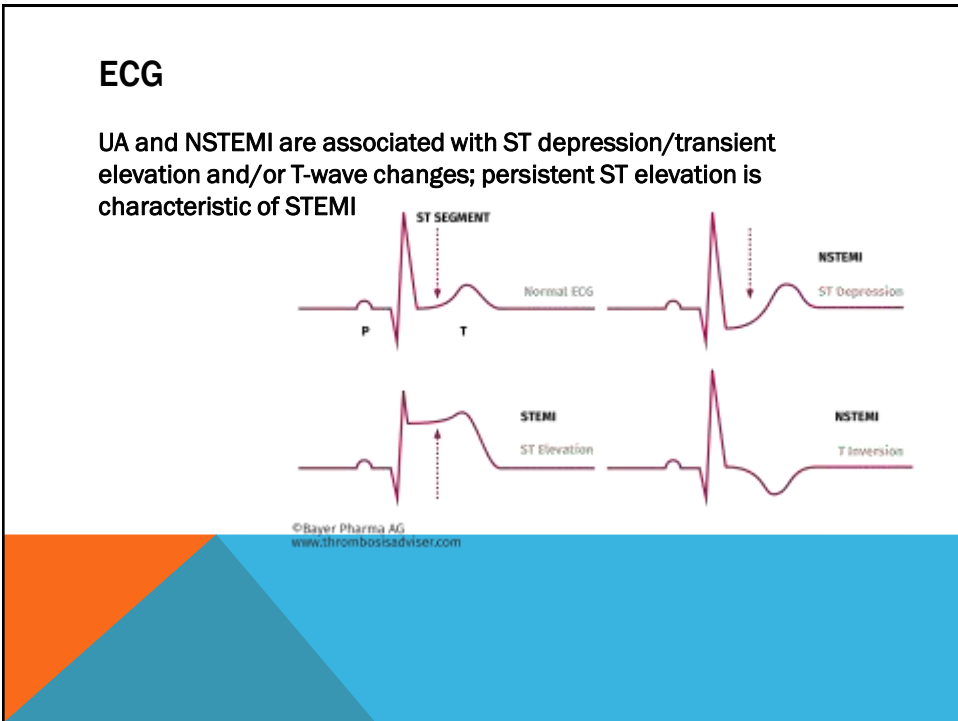
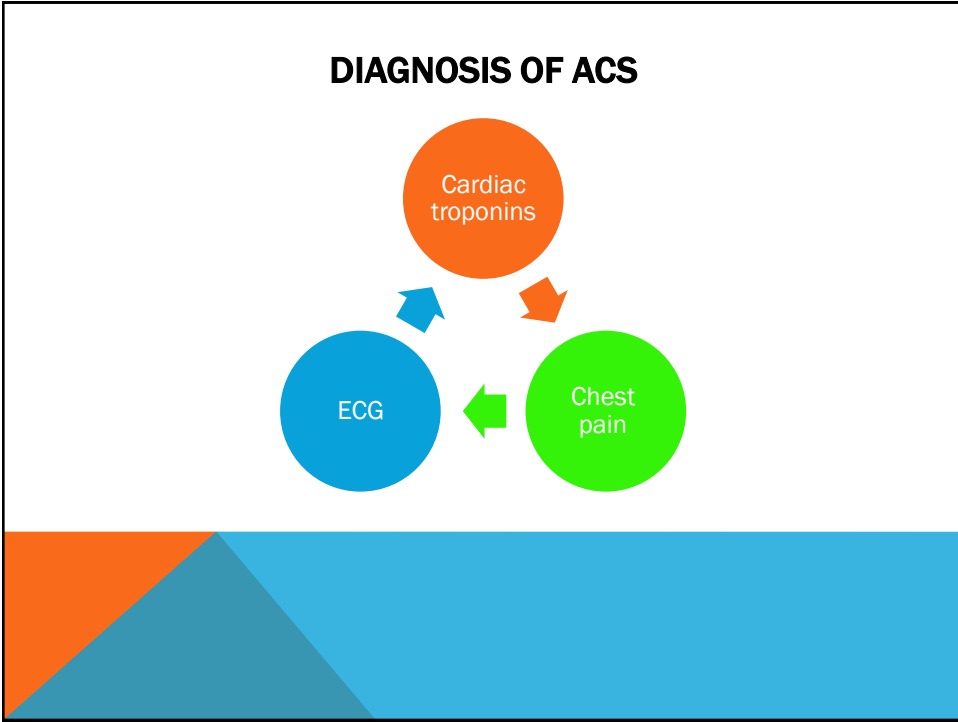
RISK FACTORS

High cholesterol and triglycerides. A low-fat, high-fiber diet will help reduce your cholesterol and triglyceride levels. High cholesterol and high triglycerides can cause blockage of arteries.

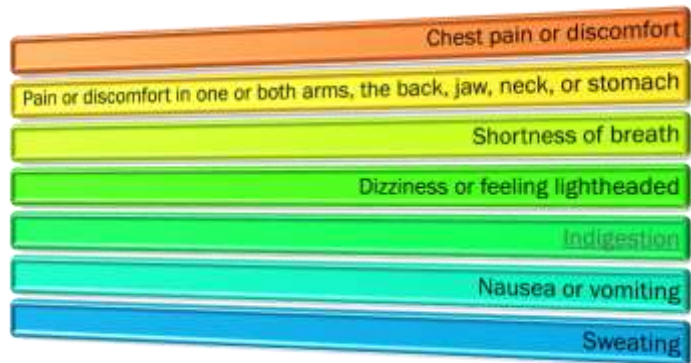
Lack of physical activity. People who are sedentary are almost twice as likely to suffer a heart attack as are people who exercise regularly.

Type 2 diabetes. Heart disease and stroke are the leading causes of death in people with diabetes.

Family history. If your relatives, especially immediate family, have experienced chest pain, heart disease or stroke, your chances of developing ACS increase.



CLINICAL PICTURE



LABS INVESTIGATION

Cardiac troponins: Troponin levels are sensitive markers of myocardial injury; elevated troponin levels as a result of myocardial damage can be used to distinguish UA from NSTEMI

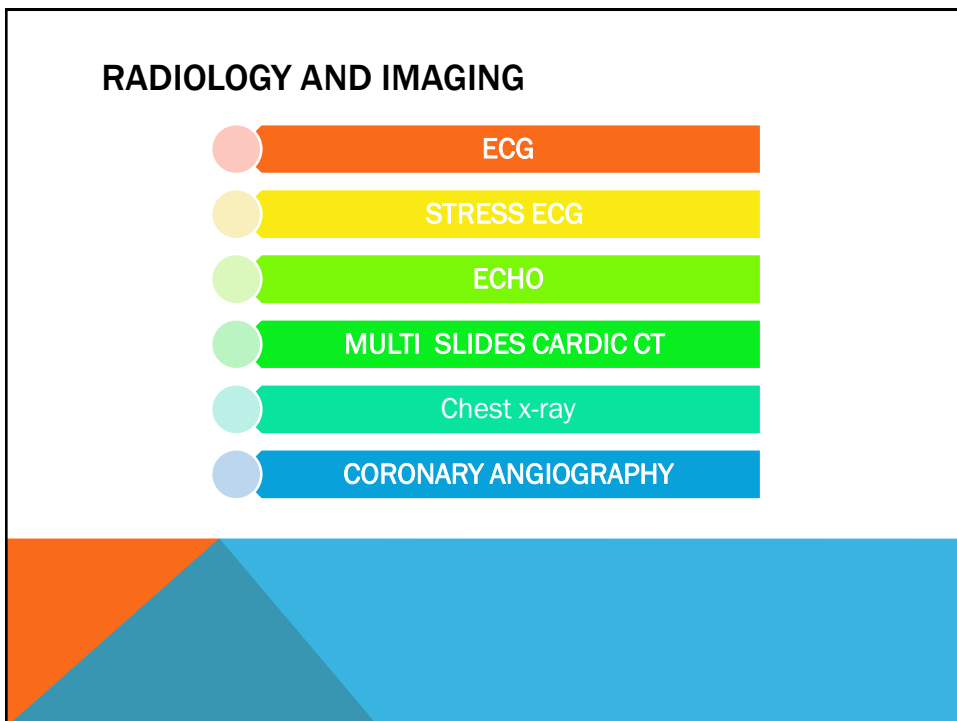
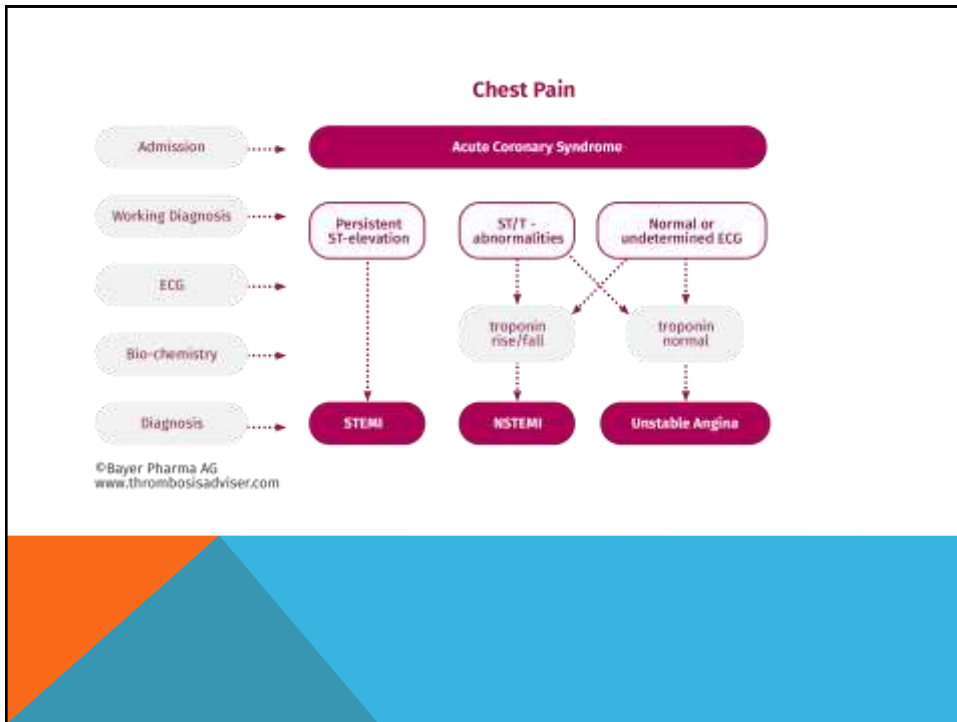


LABS INVESTIGATION

CK-MB elevations can be seen in MI, myocarditis, cardiac contusion, cardiac catheterizations, electroshock cardioversion, cardiac surgery, muscular dystrophy, renal failure, rhabdomyolysis, prostate surgery, cesarean section, athletic activity;

LABS INVESTIGATION

CK elevated in conditions with high CK-MB and also cerebrovascular accidents, head injuries, encephalitis, delirium tremens, hepatic coma, uremic coma, epileptic attacks, myositis, alcoholic myopathy, surgery involving skeletal muscle, extreme muscle exertion, hyperkalemia, hypothyroidism, hyperthyroidism, intramuscular injections, pulmonary disorders



Initial Management of ACS symptoms

Stabilisation & symptomatic relief → [MONA]

- **Morphine** → Pain relief → Reduced associated sympathetic activity → Decreased myocardial O₂ demand
- **Oxygen**
- **Nitrates** → GTN – how does this work to relieve the pain?
- **Aspirin**

Key question for subsequent management is whether there is STEMI or not

Treatment

Surgery and other procedures

Medications

MEDICATIONS

Thrombolytics, also called clot busters, help dissolve a blood clot that's blocking an artery.

Nitroglycerin improves blood circulation by temporarily widening blood vessels.

Antiplatelet drugs, which help prevent blood clots from forming, include aspirin, clopidogrel (Plavix), prasugrel (Effient) and others.

Beta blockers help relax your heart muscle and slow your heart rate, thereby decreasing the demand on your heart and lowering your blood pressure. These include metoprolol (Lopressor), nadolol (Corgard) and several others.

MEDICATIONS

Angiotensin-converting enzyme (ACE) inhibitors expand blood vessels and improve blood flow, allowing the heart to work more easily and efficiently. They include lisinopril (Prinivil, Zestril), benazepril (Lotensin) and several others.

Angiotensin receptor blockers (ARBs), which help control blood pressure, include irbesartan (Avapro), losartan (Cozaar) and several others.

Statins lower the amount of cholesterol circulating in the blood and may stabilize plaque deposits, making them less likely to rupture. Statins include atorvastatin (Lipitor), simvastatin (Zocor) and several others.

SURGERY AND OTHER PROCEDURES

If medications aren't enough to restore blood flow to your heart muscles, your doctor may recommend one of these procedures:

Angioplasty and stenting. In this procedure, your doctor inserts a long, tiny tube (catheter) into the blocked or narrowed part of your artery. A wire with a deflated balloon is passed through the catheter to the narrowed area. The balloon is then inflated, opening the artery by compressing the plaque deposits against your artery walls. A mesh tube (stent) is usually left in the artery to help keep the artery open.

Coronary bypass surgery. With this procedure, a surgeon takes a piece of blood vessel (graft) from another part of your body and creates a new route for blood that goes around, or bypasses, a blocked coronary artery.

PREVENTION



Don't smoke

Eat a heart-healthy diet

Be active

Check your cholesterol

Healthy and a Balance Diet



PREVENTION



Control your blood pressure

Maintain a healthy weight

Manage stress

Drink alcohol in moderation

Thank you

