

Heart Attack

Each person has specific toxic exposures along with dietary and genetic weaknesses that are causing their symptoms. Toxic exposures can be inorganic like heavy metals, DDT, VOC's, Radio-active waste and any other chemical like food additives or pesticides and fertilizers sprayed on the foods. They can also be organic or living organisms like parasites, bacteria, viruses, or fungi. All the different possible combinations make it difficult to accurately address issues unless you have experienced medical professionals mapping through all your different clinical symptoms.

Dr. Marilyn Tucker founded The Vibrant Health Community to do Symptom Mapping to be able to bring a completely personalized plan for each person. When you join the Vibrant Health Community you have your own medical team of doctor, pharmacist and health coach. This Team specializes in Integrative-Complementary Medicine. They will work with your personal physician to bring you to a place of as much natural healing as your body will allow. For those of you that have health issues that require prescription medications, your Team can help introduce natural measures that can reduce the imbalances and complications that inevitably come with prescription medication. This can reduce side effects and possible additional drugs having to be introduced.

Definition

A heart attack is when low blood flow causes the heart to starve for oxygen. Heart muscle dies or becomes permanently damaged. Your doctor calls this a myocardial infarction.

Alternative Names

Myocardial infarction; MI; Acute MI

Causes, incidence, and risk factors

Most heart attacks are caused by a blood clot that blocks one of the coronary arteries. The coronary arteries bring blood and oxygen to the heart. If the blood flow is blocked, the heart starves for oxygen and heart cells die.

A clot most often forms in a coronary artery that has become narrow because of the build-up of a substance called plaque along the artery walls. (See: [atherosclerosis](#)) Sometimes, the plaque cracks and triggers a blood clot to form.

Occasionally, sudden overwhelming stress can trigger a heart attack.

It is difficult to estimate exactly how common heart attacks are because as many as 200,000 to 300,000 people in the United States die each year before medical help is sought. It is estimated that approximately 1 million patients visit the hospital each year with a heart attack. About 1 out of every 5 deaths are due to a heart attack.

Risk factors for heart attack and coronary artery disease include:

- Bad genes (hereditary factors)
- Being male
- [Diabetes](#)
- Getting older
- [High blood pressure](#)
- [Smoking](#)
- Too much fat in your diet
- Unhealthy cholesterol levels, especially high LDL ("bad") cholesterol and low HDL ("good") cholesterol

Higher-than-normal levels of [homocysteine](#), [C-reactive protein](#), and [fibrinogen](#) may also increase your risk for a heart attack. Homocysteine is an [amino acid](#). C-reactive protein and fibrinogen are linked to inflammation. Fibrinogen is also involved in blood clotting.

Symptoms

[Chest pain](#) is a major symptom of heart attack. However, some people may have little or no chest pain, especially the elderly and those with diabetes. This is called a silent heart attack.

The pain may be felt in only one part of the body or move from your chest to your arms, shoulder, neck, teeth, jaw, belly area, or back.

The pain can be severe or mild. It can feel like:

- Squeezing or heavy pressure
- A tight band around the chest
- Something heavy sitting on your chest
- Bad indigestion

Pain usually lasts longer than 20 minutes. Rest and a medicine called nitroglycerine do not completely relieve the pain of a heart attack.

Other symptoms of a heart attack include:

- Shortness of breath
- Nausea or vomiting
- Anxiety
- Cough
- Fainting
- Lightheadedness - dizziness
- Palpitations (feeling like your heart is beating too fast)
- Sweating, which may be extreme

Signs and tests

A heart attack is a medical emergency. If you have symptoms of a heart attack, seek immediate medical help.

The health care provider will perform a physical exam and listen to your chest using a stethoscope. The doctor may hear abnormal sounds in your lungs (called crackles), a heart murmur, or other abnormal sounds.

You may have a rapid pulse. Blood pressure may be normal, high, or low.

Tests to look at your heart include:

- Coronary angiography
- CT scan
- Echocardiography
- Electrocardiogram (ECG) -- once or repeated over several hours
- MRI
- Nuclear ventriculography

Blood tests can help show if you have substances produced by heart tissue damage or a high risk for heart attack. These include:

- Troponin I and troponin T
- CPK and CPK-MB
- Serum myoglobin

Treatment

If you had a heart attack, you will need to stay in the hospital, possibly in the intensive care unit (ICU). You will be hooked up to an ECG machine, so the health care team can look at how your heart is beating. Life-threatening arrhythmias (irregular heart beats) are the leading cause of death in the first few hours of a heart attack.

The health care team will give you oxygen, even if your blood oxygen levels are normal. This is done so that your body tissues have easy access to oxygen, so your heart doesn't have to work as hard.

An intravenous line (IV) will be placed into one of your veins. Medicines and fluids pass through this IV. You may need a tube inserted into your bladder (urinary catheter) so that doctors can see how much fluid your body gets rid of.

THROMBOLYTIC THERAPY

Depending on the results of the ECG, certain patients may be given blood thinners within 12 hours of when they first felt the chest pain. This is called thrombolytic therapy. The medicine is first given through an IV. Blood thinners taken by mouth may be prescribed later to prevent clots from forming.

Thrombolytic therapy is not appropriate for people who have:

- Bleeding inside their head (intracranial hemorrhage)
- Brain abnormalities such as tumors or blood vessel malformations
- Stroke within the past 3 months (or possibly longer)
- Head injury within the past 3 months

Thrombolytic therapy is extremely dangerous in women who are pregnant or persons who have:

- Severe high blood pressure
- Had major surgery or a major injury within the past 3 weeks
- Internal bleeding within the past 2-4 weeks
- Peptic ulcer disease
- A history of using blood thinners such as coumadin

MEDICINES FOR HEART ATTACKS

Many different medicines are used to treat and prevent heart attacks. Nitroglycerin helps reduce chest pain. You may also receive strong medicines to relieve pain.

Antiplatelet medicines help prevent clot formation. Aspirin is an antiplatelet drug. Another one is clopidogrel (Plavix).

Beta-blockers (such as metoprolol, atenolol, and propranolol) help reduce the strain on the heart and lower blood pressure.

ACE inhibitors (such as ramipril, lisinopril, enalapril, or captopril) are used to prevent heart failure and lower blood pressure.

SURGERY AND OTHER PROCEDURES

A procedure called angioplasty may be needed to open blocked coronary arteries. This procedure may be used instead of thrombolytic therapy. Angioplasty with stenting can be a life-saving procedure if you are having a heart attack. However, for persons with coronary heart disease, recent studies show that medicine and angioplasty with stenting have equal benefits. Angioplasty with stenting does not help you live longer, but it can reduce angina or other symptoms of coronary artery disease.

Some people may need emergency coronary artery bypass surgery (CABG).

Expectations (prognosis)

How well you do after a heart attack depends on the amount and location of damaged tissue. Your outcome is worse if the heart attack caused damage to the signaling system that tells the heart to contract.

About a third of heart attacks are deadly. If you live 2 hours after an attack, you are likely to survive, but you may have complications. Those who do not have complications may fully recover.

Usually a person who has had a heart attack can slowly go back to normal activities, including sexual activity.

Complications

- Blood clot in the lungs (pulmonary embolism)

- [Cardiogenic shock](#)
- [Congestive heart failure](#)
- Damage extending past heart tissue (infarct extension)
- Damage to heart valves or the wall between the two sides of the heart
- Inflammation around the lining of the heart ([pericarditis](#))
- Irregular heart beats, including [ventricular tachycardia](#) and ventricular fibrillation
- Side effects of drug treatment

Calling your health care provider

Immediately call your local emergency number (such as 911) or go to the hospital emergency room if you have symptoms of a heart attack.

Prevention

To prevent a heart attack:

- Keep your blood pressure, blood sugar, and cholesterol under control.
- Don't smoke.
- Consider drinking 1 to 2 glasses of alcohol or wine each day. Moderate amounts of alcohol may reduce your risk of cardiovascular problems. However, drinking larger amounts does more harm than good.
- Eat a low fat diet rich in fruits and vegetables and low in animal fat.
- Eat fish twice a week. Baked or grilled fish is better than fried fish. Frying can destroy some of the benefits.
- Exercise daily or several times a week. Walking is a good form of exercise. Talk to your doctor before starting an exercise routine.
- Lose weight if you are overweight.

If you have one or more risk factors for heart disease, talk to your doctor about possibly taking aspirin to help prevent a heart attack. Aspirin therapy (dose 75 mg to 325 mg a day) or a drug called clopidogrel may be prescribed for women at high risk for heart disease. Aspirin therapy is recommended for women over age 65 to prevent heart attack and stroke as long as blood pressure is controlled and the benefit is likely to outweigh the risk of gastrointestinal side effects. Regular use of aspirin is not recommended for healthy women under age 65 to prevent heart attacks.

New guidelines no longer recommend hormone replacement therapy, vitamins E or C, antioxidants, or folic acid to prevent heart disease.

After a heart attack, you will need regular follow-up care to reduce the risk of having a second heart attack. Often, a cardiac rehabilitation program is recommended to help you gradually return to a normal lifestyle. Always follow the exercise, diet, and medication plan prescribed by your doctor.

References

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