PROCEDURE

Heart attack first aid

Heart attack first aid is the immediate care given while emergency help is on the way.

PURPOSE
Limit delay to lifesaving assessment and treatment

PROCEDURE TYPE
Therapeutic bedside first aid with emergency activation

WHERE IT IS DONE
At the scene, then in the ambulance

ANAESTHESIA
None

HOW LONG IT TAKES
From symptom recognition until emergency responders take over

PREPARATION
None; call emergency services and unlock access

RECOVERY
Immediate ambulance transfer; no driving

MAIN RISKS
Treatment delay, aspirin bleeding, CPR-related injury

RESULTS
Immediate ECG; blood tests may take hours

Overview

Heart attack first aid is the immediate care given when a heart attack may be happening. Its main purpose is to get emergency medical help quickly and support you until trained responders arrive.

A heart attack happens when blood flow to part of the heart is blocked. Prompt treatment can reduce damage to the heart. First aid cannot confirm or rule out a heart attack, and it is not a replacement for ambulance care.

Possible warning signs include pressure, tightness, heaviness, or pain in the chest. Discomfort may spread to an arm, the jaw, neck, back, or upper abdomen. You may also become short of breath, sweaty, light-headed, sick, or unusually weak. Some people have little or no chest pain.

If these symptoms are new, severe, unexplained, or last more than a few minutes, call your

local emergency number. Do not wait to see whether they disappear.

Why the procedure is performed

Heart attack first aid is performed to shorten the time before assessment and treatment. An ambulance team can monitor your heart, begin treatment, and alert the hospital before you arrive.

It is also used to protect you if your condition suddenly worsens. A heart attack can sometimes cause cardiac arrest, meaning the heart stops pumping blood effectively. Cardiopulmonary resuscitation, or CPR, and an automated external defibrillator, or AED, may then be needed.

Who should and should not have it

Emergency assessment is appropriate when you have symptoms that could be caused by a heart attack, even if you are unsure. It is especially important if the symptoms occur at rest, keep returning, or feel different from symptoms you have had before.

There is no reason to delay calling emergency services while trying to decide whether the symptoms are "serious enough." Other conditions can resemble a heart attack and may also need urgent care.

However, not every part of first aid is right for everyone:

- Aspirin should not be taken if you are allergic to it, have active serious bleeding, or have been told not to take it. Follow the emergency call handler's instructions.
- Nitroglycerin should be used only if it was prescribed for you. Do not take another person's medicine.
- CPR is for someone who is unresponsive and not breathing normally. It should not be performed on an awake person.
- An AED is used after cardiac arrest. It checks the heart rhythm and gives a shock only when appropriate.

How to prepare

No medical preparation is needed. Call your local emergency number first. Use a speakerphone if possible so you can follow instructions while remaining with the person who is unwell.

Unlock the entrance, secure pets, and arrange for someone to guide responders to the correct

location. Gather a medicine list and allergy information if these are easy to reach, but do not delay the emergency call.

If your treating facility has given you a written emergency plan, its instructions take priority over general preparation advice. Do not follow any plan that delays calling emergency services for possible heart attack symptoms.

What happens during the procedure

The first step is to call emergency services. Give the location, describe the symptoms, and say when they began. Stay on the line until the call handler says you can disconnect.

You will usually be helped into a comfortable resting position. Avoid walking around or making unnecessary effort. Tight clothing around the neck or chest may be loosened.

The call handler may advise you to chew and swallow aspirin if it is safe for you. If there is uncertainty about an allergy, bleeding risk, or whether aspirin is suitable, wait for professional advice.

If you have prescribed nitroglycerin for chest pain, use it exactly as your own treatment plan directs. Tell the emergency team what you have taken.

You should not eat, drink, smoke, or drive yourself to hospital. Stay with another person when possible.

If you become unresponsive and are not breathing normally, the person with you should:

Someone trained in conventional CPR may also give rescue breaths. An untrained helper can perform hands-only CPR as directed by the emergency call handler.

- Call emergency services or send someone to call
- Begin chest compressions in the centre of your chest
- Use an AED as soon as one is available
- Follow the call handler's and AED's spoken instructions

Recovery and what to expect afterward

Pain: Chest discomfort may continue while help is arriving. The ambulance team can assess the pain and provide appropriate treatment. CPR can cause chest soreness, bruising, or rib injuries, but these risks are outweighed by the need to restore blood flow during cardiac arrest.

Eating: Do not eat or drink unless the emergency team says it is safe. Tests or urgent

procedures may be needed at the hospital.

Activity: Remain at rest until assessed. After hospital treatment, activity usually increases gradually according to your discharge plan. Cardiac rehabilitation may help you return to activity safely.

Driving: Do not drive yourself to hospital. After treatment, you may need to avoid driving for a period based on your diagnosis, treatment, symptoms, and local licensing rules.

Work: The time before returning to work is based on the amount of heart damage, the treatment received, your symptoms, and the physical demands of your job. This is usually discussed before discharge or at follow-up.

Risks and possible complications

The greatest risk is delaying the emergency call. Waiting for symptoms to settle, contacting a routine clinic first, or travelling alone can delay treatment.

Aspirin can cause bleeding or an allergic reaction. Nitroglycerin can lower blood pressure and cause dizziness or fainting. This is why these medicines should be used only when they are known to be appropriate.

CPR can cause bruising, broken ribs, or internal injury. These injuries are possible even when CPR is performed correctly. When someone is in cardiac arrest, the potential benefit of CPR is much greater than the risk of injury.

An AED is designed to analyse the heart rhythm before delivering a shock. It will not advise a shock when the detected rhythm is not suitable for one. Follow its instructions and make sure no one is touching the person during rhythm analysis or shock delivery.

Results and follow up

First aid does not determine whether you had a heart attack. At the hospital, an electrocardiogram, or ECG, records the heart's electrical activity. Blood tests measure substances such as troponin that are released when heart muscle is injured. These tests may need to be repeated over several hours.

Some results are available immediately, while the full assessment takes longer. If a blocked heart artery is suspected, treatment may begin before all test results are complete.

Follow-up after discharge may include a medicine review, cardiac rehabilitation, risk-factor management, and appointments with your healthcare team. Keep the written discharge

information because it should explain activity, driving, wound care, and what to do if symptoms return.

Alternatives

There is no home treatment that safely replaces emergency assessment for a possible heart attack.

Travelling by private car may seem quicker, but an ambulance can begin monitoring and treatment on the way. Emergency responders can also manage a cardiac arrest and prepare the hospital for your arrival. If an ambulance is unavailable, follow the emergency call handler's instructions about safe transport. Do not drive yourself.

A routine appointment, urgent-care visit, or video consultation may be easier to arrange, but these options cannot provide ambulance monitoring or rapid hospital treatment. They are not suitable substitutes when a heart attack is suspected.

Taking aspirin or nitroglycerin may reduce symptoms or support early treatment, but neither replaces the emergency call. Improvement after medicine does not show that the problem is harmless.

"Cough CPR" is not an alternative to standard CPR. Repeated coughing has not been established as first aid for someone having a heart attack or cardiac arrest.

When to call your healthcare team

Call emergency services now for new or returning chest pressure, tightness, or pain; discomfort spreading to the arm, jaw, neck, back, or abdomen; severe shortness of breath; collapse; or unresponsiveness. Do not use a routine message service.

After discharge, seek emergency help for symptoms your discharge plan identifies as an emergency, especially recurring chest discomfort, fainting, severe breathing difficulty, or signs of stroke such as facial drooping, arm weakness, or trouble speaking.

Contact your healthcare team promptly about worsening medicine side effects, increasing swelling, problems at a catheter or surgical wound, or difficulty following your treatment plan.

Routine follow-up is used to review medicines, recovery, driving, work, physical activity, and cardiac rehabilitation. Keep these appointments even when you feel well.

Common questions

Will I be asleep?

No. First aid does not use anaesthesia or sedation. If you need an emergency hospital procedure, the team will explain the type of pain relief or anaesthesia used.

Can I drive myself to hospital?

No. Call an ambulance. Your condition could worsen while driving, and the ambulance team can begin assessment and treatment before you reach hospital.

How painful is heart attack first aid?

Resting, monitoring, aspirin, and AED pad placement are not usually painful. Chest compressions are forceful and can cause injury, but they are used only when someone is unresponsive and not breathing normally.

When will I know whether it was a heart attack?

An ECG can provide information within minutes. Blood tests may need to be repeated over several hours before the diagnosis is clear.

What if I am not sure it is a heart attack?

Call emergency services if the symptoms could be a heart attack. You are not expected to make the diagnosis yourself.

Should I take aspirin while waiting?

Follow the emergency call handler's advice. Aspirin may be recommended, but it is not suitable for everyone and should never delay the emergency call.

Sources

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