

Chest discomfort

Section 1 of 6: What is chest discomfort?

Understand chest pain, pressure, or tightness, possible causes, warning signs, testing, and treatment.

What should I do now?

Call 911

Call 911 for new or unexplained chest pressure that persists or returns, severe trouble breathing, collapse without normal recovery, or sudden face/arm weakness or trouble speaking. Do not drive yourself.

Contact your care team

New or changing chest symptoms need prompt assessment. Ongoing or recurrent concerning discomfort belongs on the emergency pathway.

Keep your care plan

For an established diagnosis, follow your written symptom plan and keep follow-up appointments.

SECTION 1

What is chest discomfort?

Chest discomfort is pain or an unusual sensation in your chest. It may feel like pressure, tightness, squeezing, heaviness, burning, or sharp pain.

It can happen during activity or at rest. Sometimes it spreads to the arms, shoulders, back, neck, jaw, or upper abdomen.

A heart problem does not always cause severe pain

A heart attack can cause mild discomfort that comes and goes. Some people have shortness of breath, nausea, sweating, lightheadedness, or unusual fatigue, sometimes without prominent chest pain.

What is angina?

Angina is discomfort caused when the heart muscle does not receive enough oxygen-rich blood. It may occur when the heart works harder during activity, although some types happen at rest. It is a symptom that needs evaluation.

When should I call 911?

Call 911 for new or unexplained chest discomfort that lasts more than a few minutes or returns, especially with shortness of breath, sweating, nausea, or faintness. Do not wait for the pain to become severe, and do not drive yourself. If you are unsure whether symptoms represent a heart attack, call for emergency help.

Chest discomfort

Section 2 of 6: Possible causes

Understand chest pain, pressure, or tightness, possible causes, warning signs, testing, and treatment.

SECTION 2

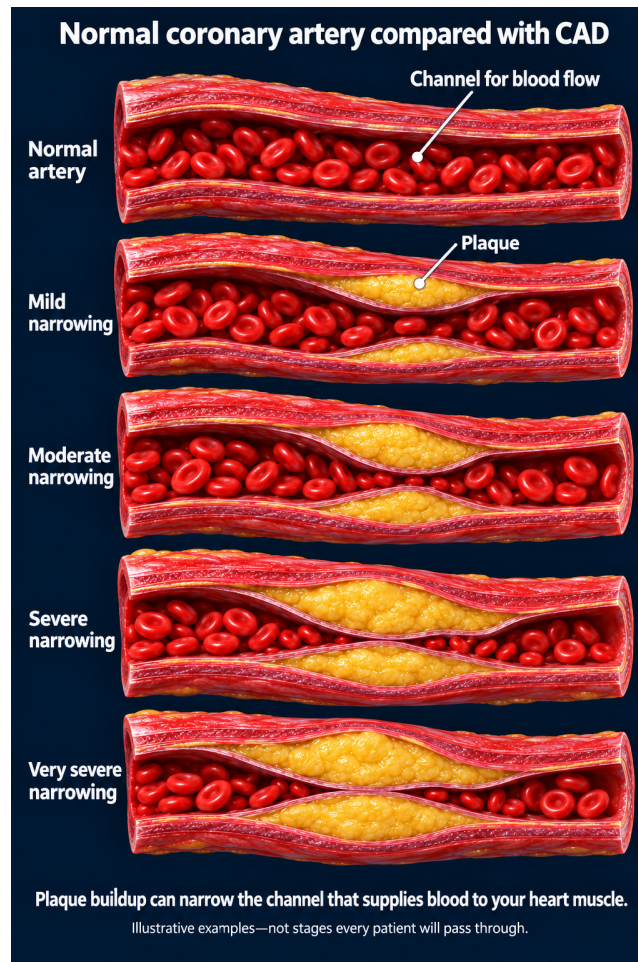
Section 2: What can cause chest discomfort?

Chest discomfort can come from the heart, lungs, digestive system, muscles, or other structures. The sensation alone cannot reliably identify the cause.

1. Reduced blood flow to the heart

Coronary artery disease

Plaque narrows the arteries supplying the heart. When the heart muscle does not receive enough oxygen-rich blood, it can cause discomfort called angina.

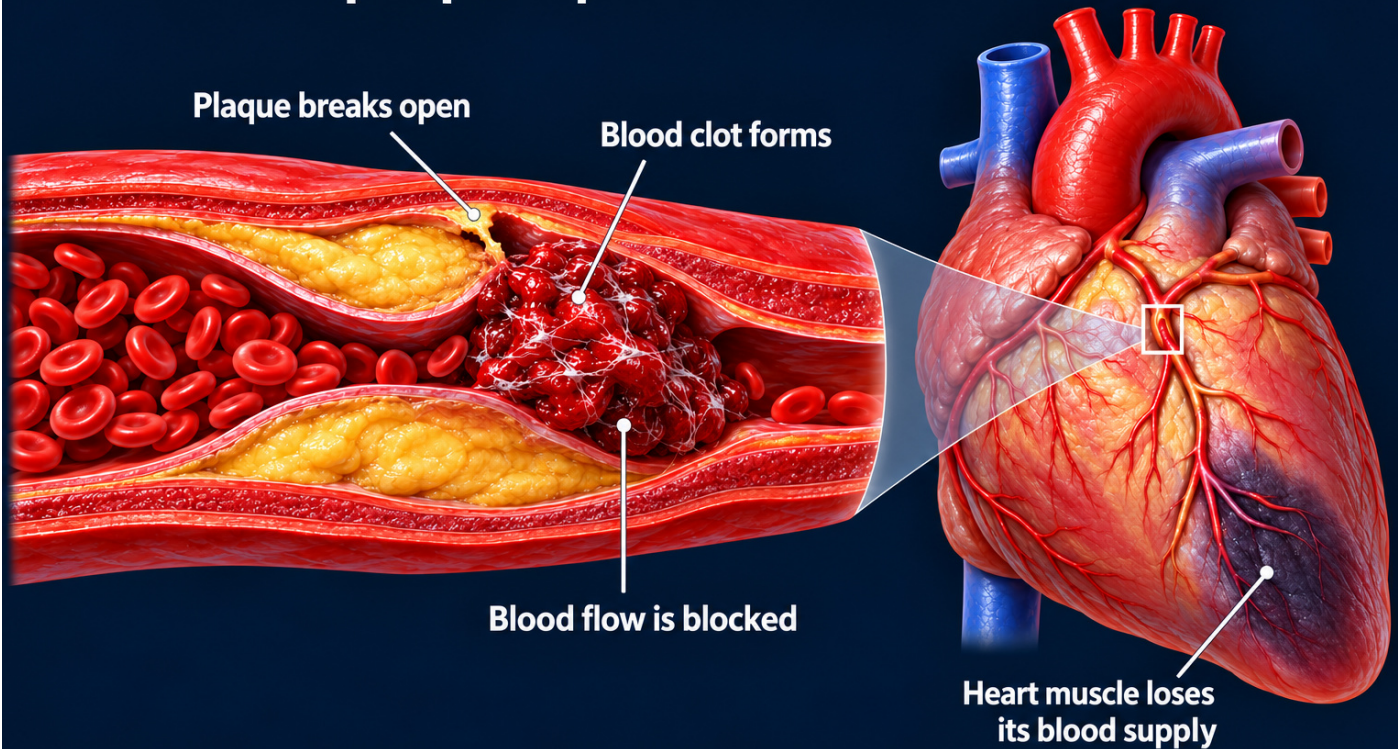


Plaque buildup can narrow the channel supplying blood to heart muscle. If blood flow cannot meet the heart's needs, angina may occur. These are illustrative examples, not stages every patient passes through.

Heart attack

A sudden interruption of blood flow damages heart muscle, often after a plaque breaks open and a clot forms.

How a plaque rupture can cause a heart attack



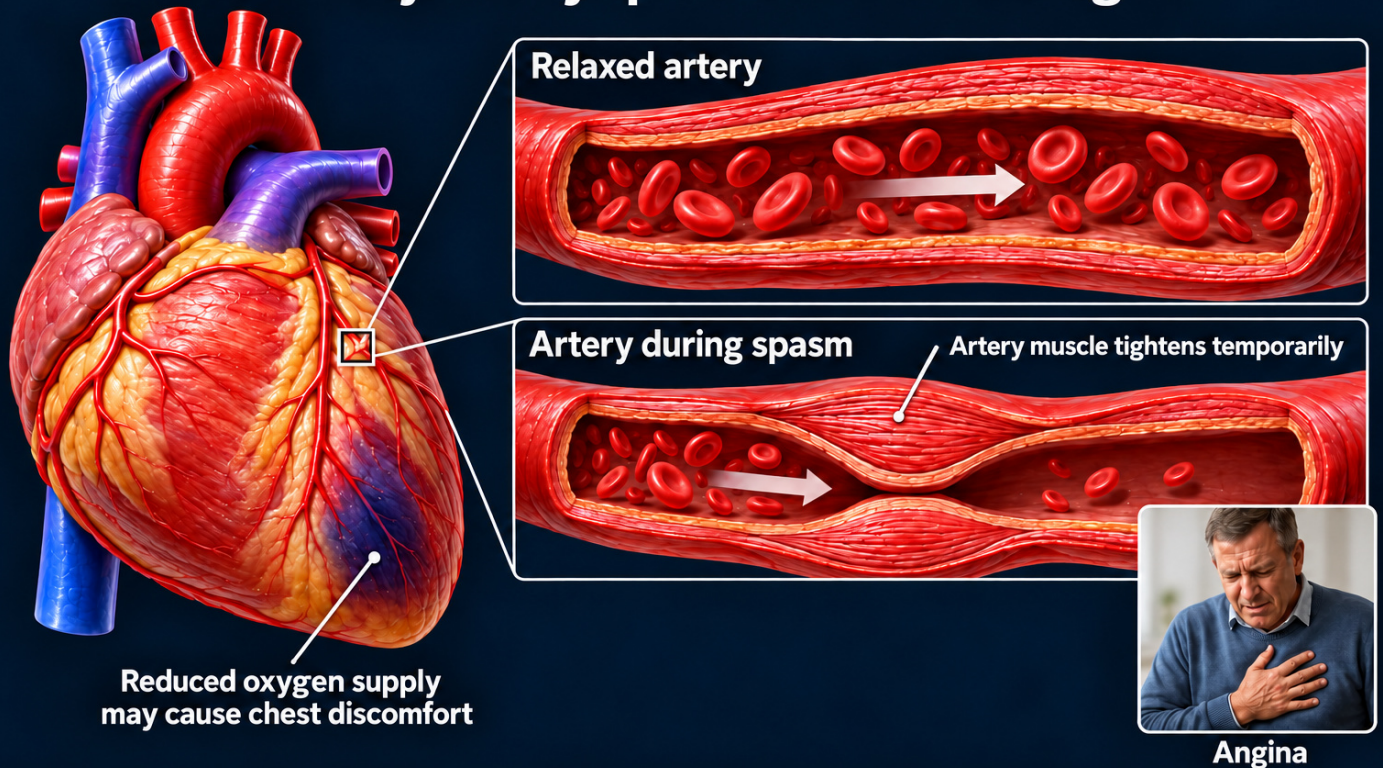
A clot at a ruptured plaque can block oxygen-rich blood and cause a heart attack.

A clot at a ruptured plaque can block oxygen-rich blood and cause a heart attack.

Coronary artery spasm

An artery temporarily tightens, reducing blood flow to heart muscle and causing angina.

Coronary artery spasm can cause angina



A temporary tightening of a coronary artery can reduce blood flow to heart muscle.

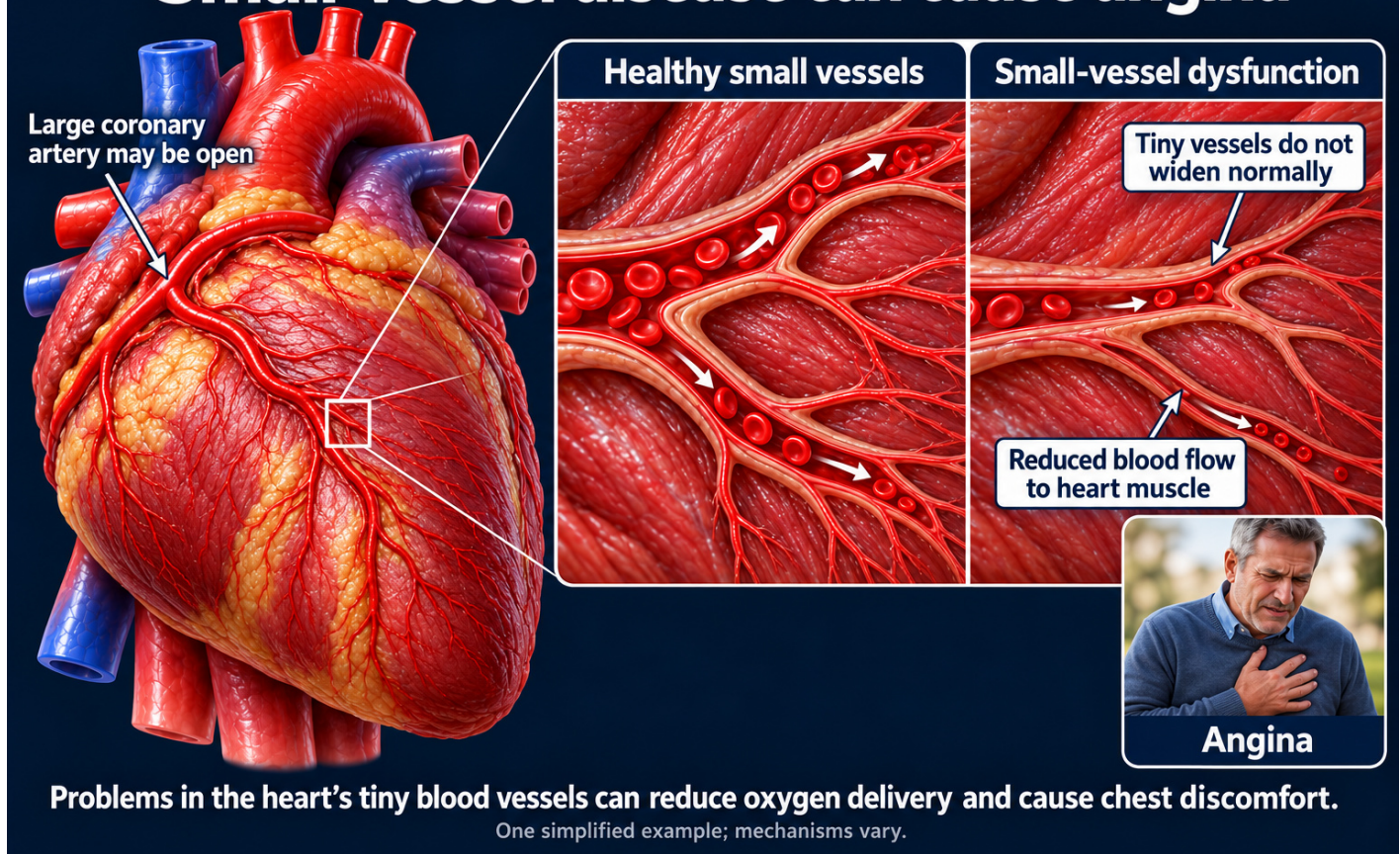
This is a simplified conceptual teaching illustration, not diagnostic imaging.

A temporary tightening of a coronary artery can reduce blood flow. The illustration shows spasm without a plaque blockage; spasm can also occur in patients who have plaque.

Small-vessel disease

The heart's smaller blood vessels do not regulate blood flow normally. Heart-related discomfort can occur even without a major blockage in a large coronary artery.

Small-vessel disease can cause angina



Problems in the heart's tiny vessels can limit oxygen delivery and cause angina, even when the larger arteries are open. This shows one simplified example; mechanisms vary.

2. Other heart conditions

Inflammation around the heart, called pericarditis, can cause chest pain. Certain valve problems or fast heart rhythms can also cause discomfort.

3. Causes outside the heart

Examples include:

- Digestive problems: Acid reflux or spasms of the esophagus.
- Chest-wall problems: Muscle strain or inflammation where ribs meet the breastbone.
- Lung problems: Pneumonia, inflammation around the lungs, a collapsed lung, or a blood clot in the lungs.

- Anxiety or panic attacks: These can cause chest discomfort and rapid breathing.

A tear in the wall of the aorta - the body's main artery - is another serious cause. Some causes outside the heart are also life-threatening emergencies.

Avoid diagnosing yourself by the feeling alone

Burning discomfort is not always reflux, and sharp pain is not always harmless. New or unexplained symptoms should be assessed rather than automatically attributed to indigestion, muscle pain, or anxiety.

Chest discomfort

Section 3 of 6: When to seek help

Understand chest pain, pressure, or tightness, possible causes, warning signs, testing, and treatment.

SECTION 3

When should I seek help?

New or unexplained chest discomfort can be serious. You do not need to be certain that it is a heart attack before seeking help.

Call 911 for possible heart attack symptoms

Get emergency help for chest discomfort that lasts more than a few minutes or goes away and returns, especially when it occurs with:

- Shortness of breath.
- A cold sweat, nausea, or vomiting.
- Lightheadedness or fainting.
- Discomfort spreading to the arms, back, neck, jaw, or upper abdomen.

A heart attack can start with mild symptoms. Do not wait for severe pain, and do not drive yourself. Emergency medical teams can begin treatment on the way to the hospital.

Changes in your usual angina need attention

If you have known angina, symptoms at rest, with less activity than usual, or that become stronger, more frequent, or longer-lasting may signal a serious change. Symptoms that do not improve with your prescribed plan need emergency evaluation.

Arrange evaluation for recurring symptoms

If you do not have emergency warning signs but have recurring or unexplained discomfort, contact your clinician promptly, even if it has resolved. Describe when it happens, how long it lasts, and what triggers or relieves it. Do not wait for a routine appointment if the pattern changes.

Chest discomfort

Section 4 of 6: Evaluation

Understand chest pain, pressure, or tightness, possible causes, warning signs, testing, and treatment.

SECTION 4

Section 4: How is chest discomfort evaluated?

The first priority is to identify or rule out dangerous causes. Your care team will ask about your symptoms, examine you, and select tests based on your situation. Not everyone needs every test.

1. An EKG

An EKG records your heart's electrical activity through patches placed on your skin. It can reveal rhythm problems or changes suggesting reduced blood flow.

A normal EKG alone does not rule out a heart attack or another heart-related cause of discomfort.



An EKG is a quick, painless recording of the heart's electrical activity.

2. Blood tests

When a heart attack is suspected, blood tests check for troponin, a protein released when heart muscle is injured. Testing may need to be repeated because changes can take time to appear.

Your team interprets these results together with your symptoms and EKG.

3. An echocardiogram

An echocardiogram, or echo, uses ultrasound to examine the heart's pumping function and valves. It can help identify structural problems that may contribute to symptoms.



An echocardiogram uses sound waves to show the heart's structure and pumping function.

4. A stress test

For selected patients, a stress test checks how the heart responds to increased workload.

You may walk on a treadmill or receive medication if exercise is not appropriate. Some tests include ultrasound or nuclear images to assess the heart's function or blood supply.

A stress test is not a substitute for emergency evaluation of possible heart attack symptoms.

Treadmill stress test



A treadmill stress test monitors your heart's response to exercise.



Nuclear stress testing uses a tracer and a special camera to compare blood flow at rest and during stress. Stress may be produced by exercise or medication.

5. Looking at the coronary arteries

- Coronary CT angiography: A CT scan that examines the arteries supplying the heart.
- Coronary angiography: A catheter procedure using contrast dye and X-ray images to identify narrowed or blocked arteries.

Your doctor chooses these tests when the findings could help guide treatment.



A coronary angiogram uses contrast dye and X-rays to outline the coronary arteries. This example shows access through an artery at the wrist.

6. Testing for other causes

Chest X-rays or other scans may be needed to look for lung problems, blood clots, or problems involving the aorta.

If symptoms persist despite no major coronary blockage, selected patients may need further evaluation for coronary spasm or small-vessel dysfunction.

The goal is to explain your symptoms and choose the right treatment - not simply to order every available test.

Chest discomfort

Section 5 of 6: Treatment

Understand chest pain, pressure, or tightness, possible causes, warning signs, testing, and treatment.

SECTION 5

How is chest discomfort treated?

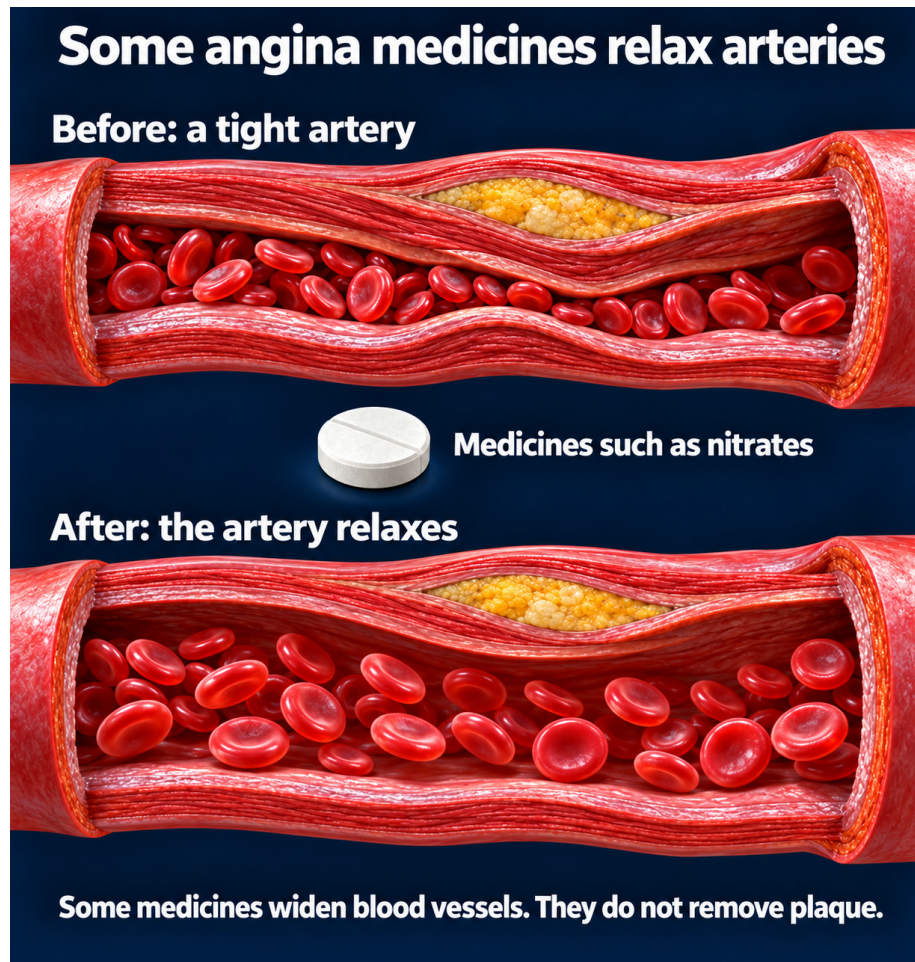
Treatment depends on what is causing your symptoms. The goal is to relieve discomfort, treat the underlying problem, and reduce the risk of future complications.

1. Narrowed coronary arteries

When cholesterol plaque reduces blood flow to the heart, treatment may include:

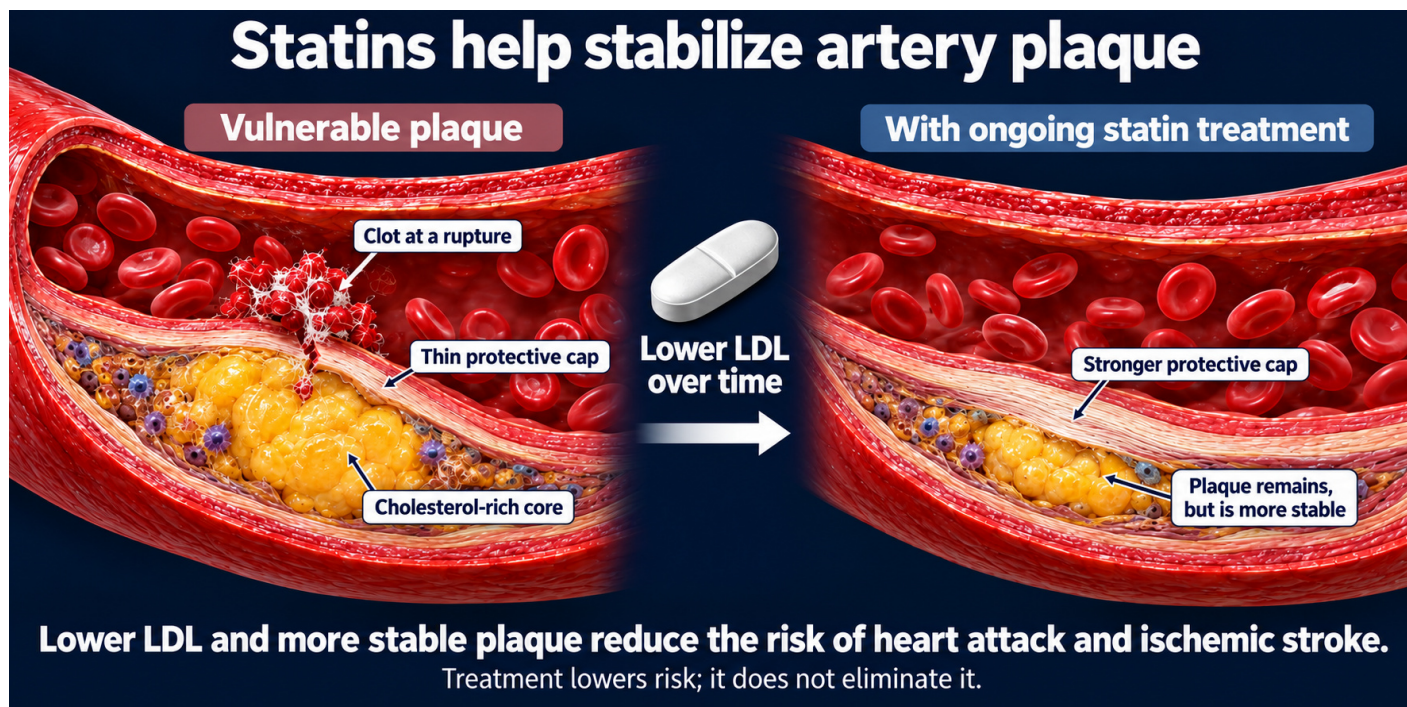
- Medicines for angina: These can improve blood flow or reduce how hard the heart works.
- Cholesterol treatment: Statins and other medicines lower LDL cholesterol and help reduce cardiovascular risk.
- Antiplatelet medicines: Your clinician may prescribe these to reduce the risk of blood clots.
- Stents or bypass surgery: Some patients need a procedure to improve blood flow, depending on their symptoms, test results, and the location and severity of their blockages.

Not every narrowing requires a stent or surgery. Your cardiologist will help choose the best approach.



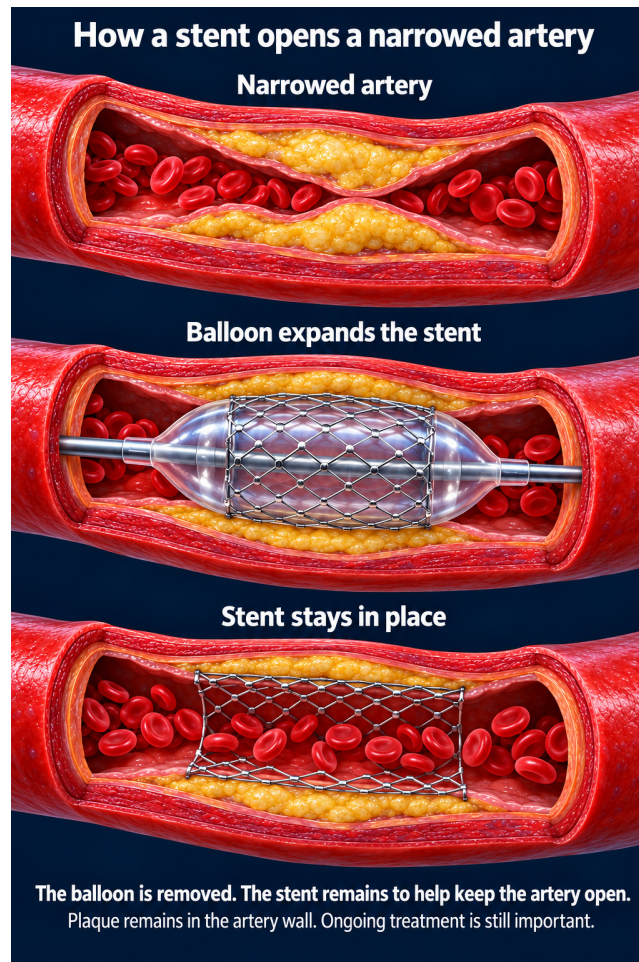
Some anti-anginal medicines, such as nitrates, relax blood vessels and can improve blood flow. Other medicines reduce how hard the heart works. These medicines do not remove cholesterol plaque.

Cholesterol treatment helps protect artery plaque



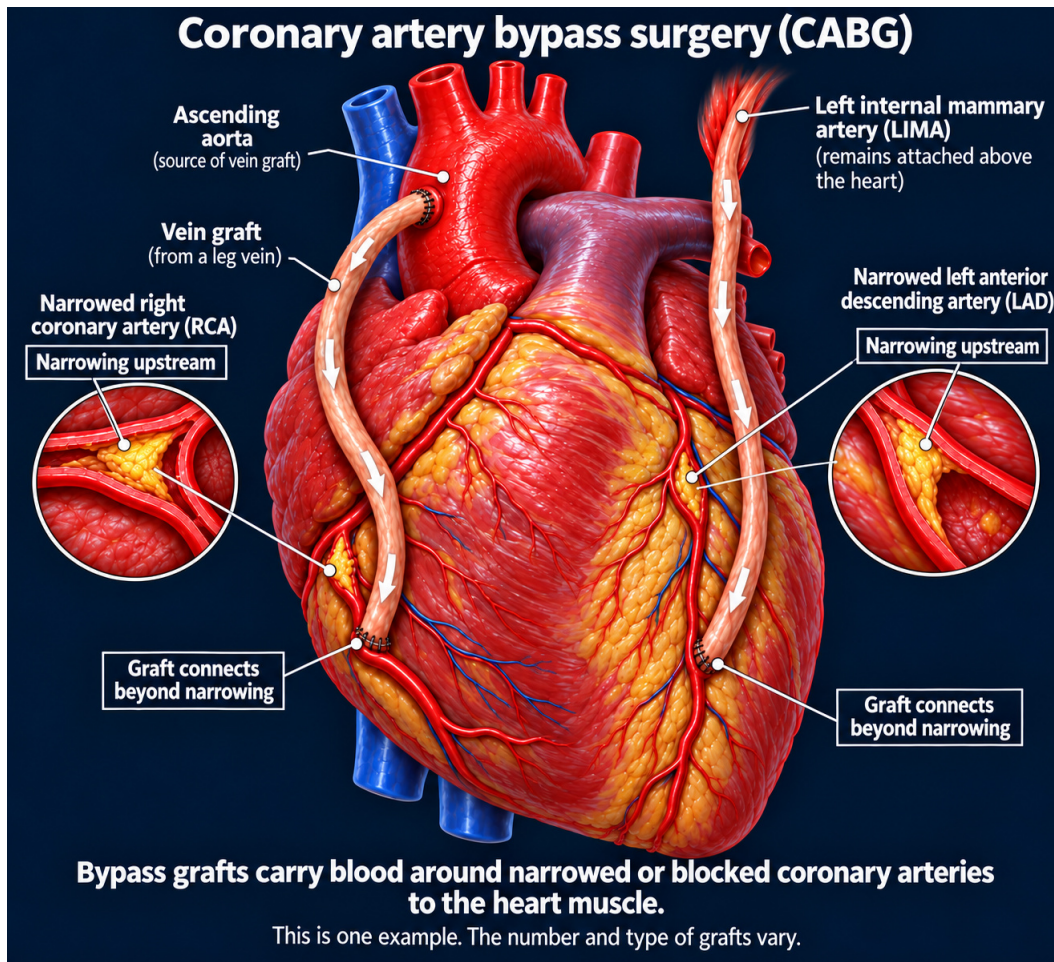
Statins lower LDL and help stabilize plaque over time, reducing the risk of heart attack and ischemic stroke. Treatment lowers risk; it does not eliminate it. This illustration does not show treatment of an active clot.

A stent helps open a narrowed artery



The balloon expands the stent against the artery wall. After the balloon is removed, the stent remains to support the open channel. Plaque remains in the wall, so ongoing treatment is still important.

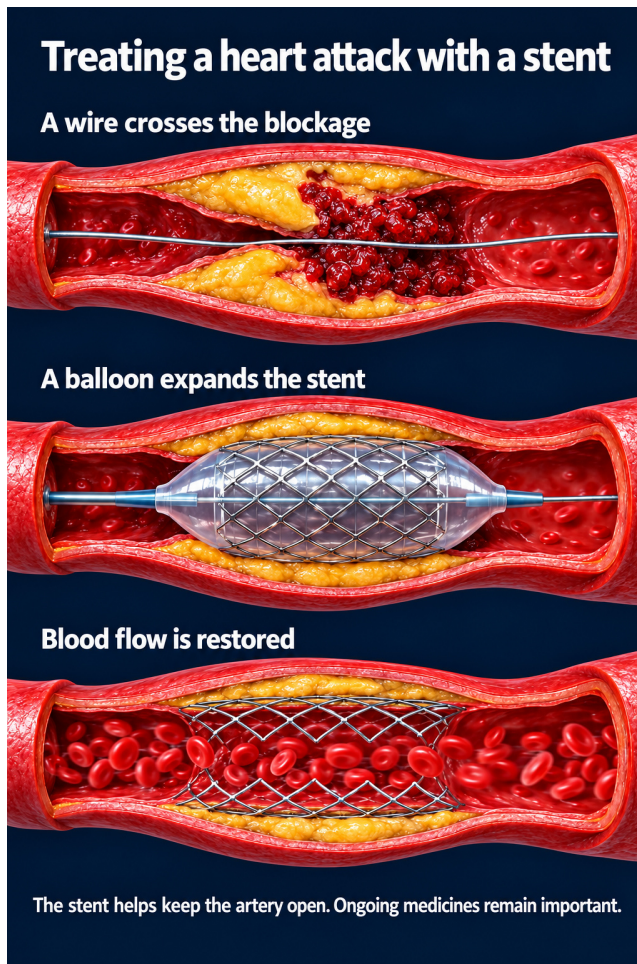
Bypass surgery creates a new route for blood flow



Each graft connects to the coronary artery beyond its narrowing. Blood travels through the graft to reach heart muscle downstream of the blockage. The number and type of grafts vary.

2. A heart attack

A heart attack requires emergency treatment. When a clot blocks a coronary artery, doctors may urgently restore blood flow with a catheter procedure and stent. Other treatments may be needed depending on the situation.



During emergency treatment, a thin guidewire crosses the blockage. A balloon expands the stent at the affected area. After the balloon is removed, the stent remains to support blood flow. This is an illustrative example; ongoing medicines remain important.

Why antiplatelet medicines are important after a heart attack or stent

A stent opens the artery, but a blood clot can still form inside it. Antiplatelet medicines make platelets - small blood cells involved in clotting - less likely to stick together. They help prevent clots in the coronary arteries and inside the stent, helping keep blood flowing to the heart.

After a heart attack or stent, your doctor may prescribe aspirin together with another antiplatelet medicine, such as clopidogrel (Plavix), prasugrel (Effient), or ticagrelor (Brilinta). Your cardiologist will decide which medicines you need and how long to take them.

Take these medicines exactly as prescribed, even when you feel well. Do not stop them on your own. Stopping too early can allow a clot to suddenly block the stent and cause another heart attack.

Before surgery or dental work, make sure your treating clinician coordinates any medication changes with your cardiologist. Contact your care team promptly about bleeding, side effects, or difficulty getting refills so they can help you follow a safe plan.

Sources: [NHLBI: Living with a stent](#) · [MedlinePlus: After angioplasty and stenting](#)

Call 911 for possible heart attack symptoms. Do not wait at home to see whether they improve.

3. Coronary artery spasm

Treatment aims to relax the artery and prevent episodes of tightening. Calcium channel blockers and nitrates are commonly used.

The medicines used for coronary spasm can differ from those used for other types of angina. Your clinician will choose treatment for your specific condition.

4. Small-vessel disease

Treatment helps improve blood flow through the heart's tiny vessels and reduce symptoms. Your clinician may use medicines such as beta blockers, calcium channel blockers, or ranolazine, along with treatment for cholesterol and other risk factors.

The best combination varies from person to person.

5. Causes outside the heart

Treatment may instead focus on acid reflux, chest-wall pain, a lung condition, or another identified cause. Anxiety-related symptoms may improve with appropriate treatment, including counseling.

Anxiety should not automatically be assumed to be the cause of new chest discomfort. Medical assessment helps determine the appropriate treatment.

6. Your everyday treatment plan

Avoiding tobacco, eating heart-healthy foods, and following your prescribed treatment plan can help manage angina. Ask your clinician what level of physical activity is appropriate for you.

Take medicines as prescribed, and report new, worsening, or changing symptoms.

Chest discomfort

Section 6 of 6: Your appointment

Understand chest pain, pressure, or tightness, possible causes, warning signs, testing, and treatment.

SECTION 6

Preparing for your appointment

A clear description of your symptoms helps your clinician choose the right evaluation and treatment. For a scheduled visit, use the checklist below.

Describe your discomfort

- What it feels like: Pressure, tightness, burning, heaviness, or sharp pain.
- Where you feel it: Include whether it spreads to your arm, back, neck, or jaw.
- When it happens: During activity, at rest, after meals, or with certain movements.
- How long it lasts: Seconds, minutes, or longer.
- What accompanies it: Breathlessness, sweating, nausea, dizziness, or a racing heartbeat.
- What changes it: Rest, position, or prescribed medicine - and whether episodes are becoming more frequent or severe.

Bring your medicines and records

Bring an updated medication list, including doses, supplements, and allergies. Tell your clinician about previous heart problems and your family history.

If available, bring recent hospital discharge instructions and results from prior EKGs, echocardiograms, stress tests, or angiograms.

Questions to ask

- What is the most likely cause of my discomfort?
- Which tests do I need, and what will they tell us?
- What should I do if symptoms return?
- Which activities are safe?
- What is each medicine for?
- When should I follow up?

Leave with a clear plan

Make sure you understand your treatment, any planned testing, and which symptoms require emergency care. If you have a stent, confirm which antiplatelet medicines to take and how long to take them. Do not stop them without guidance from your cardiologist.

Do not wait for an appointment if you develop new or unexplained chest discomfort that persists, or symptoms suggesting a heart attack. Call 911. Preparing notes should never delay emergency care.

Sources & further reading

NIH: Angina treatment

AHA: Heart attack warning signs

Mayo Clinic: Chest pain evaluation and treatment

NIH: Living with a stent

Updated October 2026. Educational information; your own care plan may differ. Medical illustrations are simplified examples for teaching.