

Stable angina

Information for the public

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About this information

NICE clinical guidelines advise the NHS on caring for people with specific conditions or diseases and the treatments they should receive. The information applies to people using the NHS in England and Wales.

This information explains the advice about the care and treatment of people with stable angina that is set out in NICE clinical guideline 126.

Does this information apply to me?

Yes, if you are an adult who has been diagnosed with stable angina caused by atherosclerosis, a condition in which the arteries become hardened and narrower, restricting the supply of blood to the heart.

The advice in the NICE guideline does not specifically look at:

- chest pain that recently started, which is thought to be related to the heart, or chest pain of unknown cause

- acute coronary syndrome, which includes unstable angina and a type of heart attack called non-ST-segment-elevation myocardial infarction (NSTEMI). Angina is 'unstable' when it has developed suddenly, has suddenly got worse or occurs at rest.
- angina-type pain thought to be caused by a condition not related to the heart, such as anaemia
- angina-type pain caused by other types of heart disease, such as disease affecting the heart muscle (known as cardiomyopathy) or the heart valves (for example aortic stenosis).

You might also like to consider reading the following information because the NICE guidance on stable angina refers to them too:

- Chest pain (<http://guidance.nice.org.uk/CG95>)
- Hypertension (<http://guidance.nice.org.uk/CG127>)
- Lowering cholesterol to reduce the risk of heart disease, stroke and peripheral arterial disease (<http://guidance.nice.org.uk/CG67>)
- You and your prescribed medicines: enabling and supporting patients to make informed decisions (<http://guidance.nice.org.uk/CG76>)

Your care

In the NHS, patients and healthcare professionals have rights and responsibilities as set out in the NHS Constitution (http://www.dh.gov.uk/en/DH_132961). All NICE guidance is written to reflect these. You have the right to be involved in discussions and make informed decisions about your treatment and care with your healthcare team. Your choices are important and healthcare professionals should support these wherever possible. You should be treated with dignity and respect.

To help you make decisions, healthcare professionals should explain stable angina and the possible treatments for it. They should cover possible benefits and risks related to your personal circumstances. You should be given relevant information that is suitable for you and reflects any religious, ethnic, or cultural needs you have. It should also take into account whether you have any physical or learning disability, sight or hearing problem or language difficulties. You should have access to an interpreter or advocate (someone who helps you put your views across) if needed.

Your family and carers should be given their own information and support. If you agree, they should also have the chance to be involved in decisions about your care.

You should be able to discuss or review your care as your treatment progresses, or your circumstances change. This may include changing your mind about your treatment or care. If you have made an 'advance decision' (known as a 'living will' in the past) in which you have already given instructions about any treatments that you do not wish to have, your healthcare professionals have a legal obligation to take this into account.

All treatment and care should be given with your informed consent. If, during the course of your illness, you are not able to make decisions about your care, your healthcare professionals have a duty to talk to your family or carers unless you have specifically asked them not to. Healthcare professionals should follow the Department of Health's advice on consent (www.dh.gov.uk/en/DH_103643) and the code of practice for the Mental Capacity Act. Information about the Act and consent issues is available from www.nhs.uk/CarersDirect/moneyandlegal/legal. In Wales healthcare professionals should follow advice on consent from the Welsh Government (www.wales.nhs.uk/consent).

In an emergency, healthcare professionals may give treatment immediately, without obtaining your informed consent, when it is in your best interests.

Stable angina

Stable angina is usually caused by coronary heart disease, a condition in which blood vessels in the heart become narrowed by a build up of fat. This reduces the supply of blood and oxygen to the heart. The most common symptom of stable angina is pain or a feeling of discomfort or tightness in the chest, which can often spread to the jaw, back, shoulders and arms.

An attack of angina can be brought on by anything that requires the heart to work harder, such as physical activity, emotional stress, exposure to cold or eating a heavy meal. The pain usually lasts for only a few minutes and goes away with rest. An angina attack does not damage the heart.

Information and support

Your healthcare professional should explain stable angina to you and how it can be treated

in the short and long term. They should discuss any concerns and ideas about stable angina that you, and if appropriate, your family or carers may have, and answer any questions. This should include talking about how stable angina might affect you. For example, you may be worried about having a heart attack or the effect of angina on your daily activities and life expectancy. Your healthcare professional should also explain that you should seek emergency or professional help if your angina suddenly gets worse, for example if the attacks happen more often or last longer, or if the pain is worse than before.

Lifestyle changes

People with angina have a higher risk than the general population of having a heart attack or stroke. However, there are lifestyle changes you can make to improve your symptoms and reduce your risk of a heart attack or stroke. Your healthcare professional should consider your need for psychological support, and advise you about:

- stopping smoking
- eating a healthy balanced diet
- losing excess weight
- taking regular exercise.

You may be offered treatments or other measures to help you make lifestyle changes if necessary. However, there is no evidence to suggest that taking vitamin or fish oil supplements can help improve your symptoms.

Your healthcare professional should also discuss other issues that may be important for you, for instance:

- managing your stable angina yourself by pacing your activities and setting goals
- any concerns about how stress, anxiety or depression could affect your angina
- physical exertion including sexual activity.

Questions you might like to ask about stable

angina

- Can you tell me more about stable angina?
- What should I do if I have an episode of angina?
- What should I do if I keep having episodes of angina?
- What changes can I make to my lifestyle to help my symptoms?
- Is there anything I should avoid doing? For example, are there any types of exercise that I shouldn't do?
- Are there any support organisations in my local area?
- Can you provide any information for my family or carers?

General principles of treatment for people with stable angina

People should not be excluded from treatment because of their age alone, or offered different investigations or treatments based only on their gender or family origin.

Drug treatment

Some treatments may not be suitable for you, depending on your exact circumstances. If you have questions about specific treatments and options, please talk to a member of your healthcare team.

During the course of your treatment it is likely that you will be offered different drugs. Your healthcare professional should discuss with you the possible side effects of the drugs, how they could affect your daily activities and why it is important to take drug treatment regularly.

There are three main aims of drug treatment:

- to provide immediate relief from the symptoms of angina
- to prevent future angina attacks
- to reduce your risk of having a heart attack or stroke.

Providing immediate relief from angina

You should be offered a short-acting nitrate drug called glyceryl trinitrate (GTN) to take if you get an attack of angina. You should also take it before you do something that usually brings on an attack, like physical activity, or going out when it is extremely cold. GTN comes as a spray or a tablet, to be sprayed or placed under the tongue. You may get a headache, flushing or dizziness soon after taking it. If you feel dizzy you should sit down or hold onto something until the feeling passes.

If the first dose doesn't work after 5 minutes, you should take another dose. If the pain has not gone away 5 minutes after taking the second dose, you should call an emergency ambulance.

Preventing future angina attacks

Your healthcare professional will usually offer you another drug to take every day to see whether it is effective in preventing your angina symptoms. This will usually be a drug called a beta blocker or a calcium channel blocker (see box below: 'Drugs for preventing symptoms of angina'). Your healthcare professional will check how you are getting on within two to four weeks of starting treatment, or if your treatment is changed. If your symptoms don't improve or you find the drug causes side effects which are a problem for you, your healthcare professional may change your dose of the drug, or offer you another type of drug instead or a combination of two drugs.

If you are still having symptoms with one or two drugs your healthcare professional will consider whether you need a procedure to help increase blood flow to your heart (see '[Procedures to improve blood flow to the heart](#)'). If you are already waiting for a procedure to help increase blood flow to the heart, or such a procedure is not appropriate for you, your healthcare professional may consider a third drug for you to take.

Drugs for preventing symptoms of angina

You may be offered one or more of the following drugs to help prevent your symptoms of angina:

- **Beta blockers** slow down the heart rate and reduce the amount of work the heart has to do.
- **Calcium channel blockers** relax the blood vessels, increasing the supply of blood to the heart.
- **Long-acting nitrates** widen the blood vessels, improving blood flow to the heart.
- **Ivabradine** slows down the heart rate and reduces the amount of work the heart has to do.
- **Nicorandil** relaxes the blood vessels, increasing the supply of blood to the heart.
- **Ranolazine** improves the heart's use of oxygen.

Your healthcare professional will take into account whether you have any other medical conditions, whether you are unable to take a particular type of drug, your personal preference and the cost when deciding which drug to offer you.

Reducing your risk of cardiovascular disease

Your healthcare professional may also offer you drug treatment to help reduce your risk of cardiovascular disease. This might include 75 mg aspirin each day, unless there are reasons why you cannot take it. Aspirin makes your blood less 'sticky' and less likely to form blood clots. You should also be offered a statin, which is a type of drug to help lower your blood cholesterol, so fatty deposits are less likely to form in your blood vessels. If your blood pressure is high you should also be offered treatment to help lower it. If you have diabetes you may be offered a drug called an angiotensin-converting enzyme (ACE) inhibitor to help your stable angina. If you are already taking an ACE inhibitor for another condition, you should continue to take it.

Questions you might like to ask about drug treatment

- Can you tell me why you have decided to offer me this particular type of drug?
- Are there any side effects associated with this drug?
- How long will I have to take the drug?
- Might I have problems if I stop taking the drug?
- What might happen if I forget to take it?
- How long will the drug take to have an effect?
- Will the dose be changed? When will I need to come back?
- What other treatments are available?
- What might happen if I decide not to take the drug?
- Is there some written material (like a leaflet) about the drug treatment that I can have?

Procedures to improve blood flow to the heart

If you think that your care does not match what is described in this information, please talk to a member of your healthcare team in the first instance.

If your symptoms do not respond to drug treatment

Your healthcare professional may offer you one of the following procedures to help increase blood flow to the heart and relieve your symptoms:

- using surgery to bypass the narrowed artery (known as coronary artery bypass grafting or CABG)

- a procedure that stretches and holds open the narrowed part of the artery (called percutaneous coronary intervention or PCI).

Your healthcare professional may offer you tests (see box below: 'What tests should I be offered to help decide which procedure is best for me?') to help decide which procedure is most appropriate for you. They will consider the risks and benefits of each procedure or of continuing drug treatment, taking into account any other medical conditions such as diabetes, the extent of your heart disease, the structure of the blood vessels around your heart, your age and the severity of your symptoms.

If your symptoms do respond to drug treatment

If your symptoms do respond to drug treatment, your healthcare professional should talk with you about the possibility that you may need further treatment for your heart disease. They may offer you tests (see box below: 'What tests should I be offered to help decide which procedure is best for me?') to assess the extent of your heart disease and to see whether having CABG to increase the blood flow to your heart would help you in the long term. Your healthcare professional will consider the risks and benefits of CABG or of continuing drug treatment.

Deciding about tests and procedures

The risks, benefits and limitations of having each test and procedure, or of continuing with drug treatment, will be discussed with you. Your healthcare professional will explain what each test and procedure involves, including how long you may need to spend in hospital, how long it could take to recover and any drug treatment you may need after the procedure. They will ensure that you have balanced information about your options to help you make an informed decision.

What tests should I be offered to help decide which procedure is best for me?

You may be offered one or more of the following tests:

Invasive coronary angiography uses X-rays to see how dye (called contrast medium) moves through the arteries up to the heart. This shows whether there are any narrowed or blocked arteries. It is invasive because it involves a fine, hollow tube called a catheter being inserted through the artery of the person's leg or arm and up to the heart.

CT coronary angiography uses a type of X-ray called computed tomography (CT) scanning and dye injected into the person's veins to show whether the coronary arteries are narrowed or blocked.

Functional imaging tests show how the heart works under stress. Different tests can be used depending on the circumstances and the person's preferences.

Questions you might like to ask about the procedures

- What does each procedure involve?
- Is one procedure more effective in relieving symptoms than the other?
- Which is the best procedure for me?
- What are the possible complications of the procedure?
- How long will I have to stay in hospital?
- Will I have to take drugs after the procedure?
- Am I likely to need another procedure in the future?
- What could happen if I choose not to have the recommended procedure?

When stable angina does not respond to treatment

If drug treatment and/or a procedure to improve blood flow to the heart have not improved

your symptoms, your healthcare professional should review your diagnosis, considering how your symptoms are affecting your quality of life and other possible causes of your pain. They should look at the treatments you have received and future treatment options, taking into account their benefits, risks and limitations.

Your healthcare professional may also offer you treatments that use a psychological or behavioural approach. These will help you develop skills to cope with your condition, manage the pain and improve your symptoms.

You should not be offered transcutaneous electrical nerve stimulation (TENS), enhanced external counterpulsation (EECP) or acupuncture to help you manage stable angina pain.

More information

The organisations below can provide more information and support for people with stable angina. NICE is not responsible for the quality or accuracy of any information or advice provided by these organisations.

- Blood Pressure UK, 0207 882 6218 www.bloodpressureuk.org.uk
- British Heart Foundation, 0300 330 3311 www.bhf.org.uk
- HEART UK – The Cholesterol Charity, 08454 505 988 www.heartuk.org.uk

You can also go to NHS Choices (www.nhs.uk) for more information.

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Accreditation

