NICE National Institute for Health and Care Excellence

Management of stable angina

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Contents

Introduction

Recommendations 1.5.2 and 1.5.12 partially update recommendation 1.2 of Myocardial perfusion scintigraphy for the diagnosis and management of angina and myocardial infarction (NICE technology appraisal guidance 73).

Angina is pain or constricting discomfort that typically occurs in the front of the chest (but may radiate to the neck, shoulders, jaw or arms) and is brought on by physical exertion or emotional stress. Some people can have atypical symptoms, such as gastrointestinal discomfort, breathlessness or nausea. Angina is the main symptom of myocardial ischaemia and is usually caused by atherosclerotic obstructive coronary artery disease restricting blood flow and therefore oxygen delivery to the heart muscle. The Health Survey for England (2006) reported that around 8% of men and 3% of women aged between 55 and 64 years currently have or have had angina. The figures for men and women aged between 65 and 74 years are around 14% and 8% respectively. It is estimated that almost 2 million people in England currently have or have had angina. Being diagnosed with angina can have a significant impact on a person's quality of life, restricting daily work and leisure activities.

Stable angina is a chronic medical condition with a low but appreciable incidence of acute coronary events and increased mortality. The aim of management is to stop or minimise symptoms, and to improve quality of life and long-term morbidity and mortality. Management options include lifestyle advice, drug treatment and revascularisation using percutaneous or surgical techniques.

Analysis of the comparative efficacy of different treatments for people with stable angina is difficult because of the advances in drug treatment and revascularisation strategies over several decades. Trials of drug treatment versus coronary artery bypass surgery were carried out more than 25 years ago and showed a survival advantage with surgery in patients with severe coronary artery disease. Statins and other secondary prevention treatments were not used when the trials were carried out and these treatments have a significant effect on morbidity and mortality. Percutaneous revascularisation techniques have developed, from balloon angioplasty to bare metal stents and drug eluting stents and each is associated with reduced rates of repeat revascularisation compared with the previous technique. All trials, including trials of revascularisation strategies, have been limited to people considered suitable for the intervention rather than being representative of the whole population with angina.

The recommendations in this guideline relate only to people with a diagnosis of stable angina. Coronary artery disease can also present as acute coronary syndromes, such as unstable angina or myocardial infarction. Chest pain of recent onset (NICE clinical guideline 95), covers the diagnosis of stable angina and should be read in conjunction with this guideline.

The guideline will assume that prescribers will use a drug's summary of product characteristics to inform decisions made with individual patients.

This guideline recommends some drugs for indications for which they do not have a UK marketing authorisation at the date of publication, if there is good evidence to support that use. Where recommendations have been made for the use of drugs outside their licensed indications ('off-label use'), these drugs are marked with a footnote in the recommendations.

Patient-centred care

This guideline offers best practice advice on the care of people with stable angina.

Treatment and care should take into account patients' needs and preferences. People with stable angina should have the opportunity to make informed decisions about their care and treatment, in partnership with their healthcare professionals. If patients do not have the capacity to make decisions, healthcare professionals should follow the Department of Health's advice on consent and the code of practice that accompanies the Mental Capacity Act. In Wales, healthcare professionals should follow advice on consent from the Welsh Government.

Good communication between healthcare professionals and patients is essential. It should be supported by evidence-based written information tailored to the patient's needs. Treatment and care, and the information patients are given about it, should be culturally appropriate. It should also be accessible to people with additional needs such as physical, sensory or learning disabilities, and to people who do not speak or read English.

If the patient agrees, families and carers should have the opportunity to be involved in decisions about treatment and care.

Families and carers should also be given the information and support they need.

Key priorities for implementation

The following recommendations have been identified as priorities for implementation.

- Explore and address issues according to the person's needs, which may include:
    - self-management skills such as pacing their activities and goal setting
    - concerns about the impact of stress, anxiety or depression on angina
    - advice about physical exertion including sexual activity.
- Offer people optimal drug treatment for the initial management of stable angina. Optimal drug treatment consists of one or two anti-anginal drugs as necessary plus drugs for secondary prevention of cardiovascular disease.
- Consider revascularisation (coronary artery bypass graft [CABG] or percutaneous coronary intervention [PCI]) for people with stable angina whose symptoms are not satisfactorily controlled with optimal medical treatment.
- When either procedure would be appropriate, explain to the person the risks and benefits of PCI and CABG for people with anatomically less complex disease whose symptoms are not satisfactorily controlled with optimal medical treatment. If the person does not express a preference, take account of the evidence that suggests that PCI may be the more cost-effective procedure in selecting the course of treatment.
- When either procedure would be appropriate, take into account the potential survival advantage of CABG over PCI for people with multivessel disease whose symptoms are not satisfactorily controlled with optimal medical treatment and who:
    - have diabetes **or**
    - are over 65 years **or**
    - have anatomically complex three-vessel disease, with or without involvement of the left main stem.
- Consider the relative risks and benefits of CABG and PCI for people with stable angina using a systematic approach to assess the severity and complexity of the person's coronary disease, in addition to other relevant clinical factors and comorbidities.

- Ensure that there is a regular multidisciplinary team meeting to discuss the risks and benefits of continuing drug treatment or the revascularisation strategy (CABG or PCI) for people with stable angina. The team should include cardiac surgeons and interventional cardiologists. Treatment strategy should be discussed for the following people, including but not limited to:
    - people with left main stem or anatomically complex three-vessel disease
    - people in whom there is doubt about the best method of revascularisation because of the complexity of coronary anatomy, the extent of stenting required or other relevant clinical factors and comorbidities.
- Ensure people with stable angina receive balanced information and have the opportunity to discuss the benefits, limitations and risks of continuing drug treatment, CABG and PCI to help them make an informed decision about their treatment. When either revascularisation procedure is appropriate, explain to the person:
    - The main purpose of revascularisation is to improve the symptoms of stable angina.
    - CABG and PCI are effective in relieving symptoms.
    - Repeat revascularisation may be necessary after either CABG or PCI and the rate is lower after CABG.
    - Stroke is uncommon after either CABG or PCI, and the incidence is similar between the two procedures.
    - There is a potential survival advantage with CABG for some people with multivessel disease.
- Discuss the following with people whose symptoms are satisfactorily controlled with optimal medical treatment:
    - their prognosis without further investigation
    - the likelihood of having left main stem disease or proximal three-vessel disease
    - the availability of CABG to improve the prognosis in a subgroup of people with left main stem or proximal three-vessel disease
    - the process and risks of investigation

- the benefits and risks of CABG, including the potential survival gain.

1 Guidance

The following guidance is for people who have a diagnosis of stable angina and is based on the best available evidence. The full guideline gives details of the methods and the evidence used to develop the guidance.

1.1 Diagnosis

1.1.1 Diagnose stable angina according to Chest pain of recent onset (NICE clinical guideline 95). Diagnose and manage unstable angina and NSTEMI according to Chest pain of recent onset (NICE clinical guideline 95), Unstable angina and NSTEMI (NICE clinical guideline 94) and MI: secondary prevention (NICE clinical guideline 48).

1.2 Information and support for people with stable angina

1.2.1 Clearly explain stable angina to the person, including factors that can provoke angina (for example, exertion, emotional stress, exposure to cold, eating a heavy meal) and its long-term course and management. When relevant, involve the person's family or carers in the discussion.

1.2.2 Encourage the person with stable angina to ask questions about their angina and its treatment. Provide opportunities for them to voice their concerns and fears.

1.2.3 Discuss the person's, and if appropriate, their family or carer's ideas, concerns and expectations about their condition, prognosis and treatment. Explore and address any misconceptions about stable angina and its implications for daily activities, heart attack risk and life expectancy.

1.2.4 Advise the person with stable angina to seek professional help if there is a sudden worsening in the frequency or severity of their angina.

1.2.5 Discuss with the person the purpose and any risks and benefits of their treatment.

1.2.6 Assess the person's need for lifestyle advice (for example about exercise, stopping smoking, diet and weight control) and psychological support, and offer interventions as necessary.

1.2.7 Explore and address issues according to the person's needs, which may include:

- self-management skills such as pacing their activities and goal setting
- concerns about the impact of stress, anxiety or depression on angina
- advice about physical exertion including sexual activity.

1.3 General principles for treating people with stable angina

1.3.1 Do not exclude people with stable angina from treatment based on their age alone.

1.3.2 Do not investigate or treat symptoms of stable angina differently in men and women or in different ethnic groups.

Preventing and treating episodes of angina

1.3.3 Offer a short-acting nitrate for preventing and treating episodes of angina. Advise people with stable angina:

- how to administer the short-acting nitrate
- to use it immediately before any planned exercise or exertion
- that side effects such as flushing, headache and light-headedness may occur
- to sit down or find something to hold on to if feeling light-headed.

1.3.4 When a short-acting nitrate is being used to treat episodes of angina, advise people:

- to repeat the dose after 5 minutes if the pain has not gone

- to call an emergency ambulance if the pain has not gone 5 minutes after taking a second dose.

Drugs for secondary prevention of cardiovascular disease

1.3.5 Consider aspirin 75 mg daily for people with stable angina, taking into account the risk of bleeding and comorbidities.

1.3.6 Consider angiotensin-converting enzyme (ACE) inhibitors for people with stable angina and diabetes. Offer or continue ACE inhibitors for other conditions, in line with relevant NICE guidance.

1.3.7 Offer statin treatment in line with Lipid modification (NICE clinical guideline 67).

1.3.8 Offer treatment for high blood pressure in line with Hypertension (NICE clinical guideline 34) [replaced by Hypertension (NICE clinical guideline 127)].

Dietary supplements

1.3.9 Do not offer vitamin or fish oil supplements to treat stable angina. Inform people that there is no evidence that they help stable angina.

1.4 Anti-anginal drug treatment

General recommendations

1.4.1 Offer people optimal drug treatment for the initial management of stable angina. Optimal drug treatment consists of one or two anti-anginal drugs as necessary plus drugs for secondary prevention of cardiovascular disease.

1.4.2 Advise people that the aim of anti-anginal drug treatment is to prevent episodes of angina and the aim of secondary prevention treatment is to prevent cardiovascular events such as heart attack and stroke.

1.4.3 Discuss how side effects of drug treatment might affect the person's daily activities and explain why it is important to take drug treatment regularly.

1.4.4 Patients differ in the type and amount of information they need and want. Therefore the provision of information should be individualised and is likely to include, but not be limited to:

- what the medicine is
- how the medicine is likely to affect their condition (that is, its benefits)
- likely or significant adverse effects and what to do if they think they are experiencing them
- how to use the medicine
- what to do if they miss a dose
- whether further courses of the medicine will be needed after the first prescription
- how to get further supplies of medicines. [This recommendation is from Medicines adherence (NICE clinical guideline 76).]

1.4.5 Review the person's response to treatment, including any side effects, 2–4 weeks after starting or changing drug treatment.

1.4.6 Titrate the drug dosage against the person's symptoms up to the maximum tolerable dosage.

Drugs for treating stable angina

1.4.7 Offer either a beta blocker or a calcium channel blocker as first-line treatment for stable angina. Decide which drug to use based on comorbidities, contraindications and the person's preference.

1.4.8 If the person cannot tolerate the beta blocker or calcium channel blocker, consider switching to the other option (calcium channel blocker or beta blocker).

1.4.9 If the person's symptoms are not satisfactorily controlled on a beta blocker or a calcium channel blocker, consider either switching to the other option or using a combination of the two[1].

1.4.10 Do not routinely offer anti-anginal drugs other than beta blockers or calcium channel blockers as first-line treatment for stable angina.

1.4.11 If the person cannot tolerate beta blockers and calcium channel blockers or both are contraindicated, consider monotherapy with one of the following drugs:

- a long-acting nitrate **or**
- ivabradine **or**
- nicorandil **or**
- ranolazine.

Decide which drug to use based on comorbidities, contraindications, the person's preference and drug costs.

1.4.12 For people on beta blocker or calcium channel blocker monotherapy whose symptoms are not controlled and the other option (calcium channel blocker or beta blocker) is contraindicated or not tolerated, consider one of the following as an additional drug:

- a long-acting nitrate **or**
- ivabradine[2] **or**
- nicorandil **or**
- ranolazine.

Decide which drug to use based on comorbidities, contraindications, the person's preference and drug costs.

1.4.13 Do not offer a third anti-anginal drug to people whose stable angina is controlled with two anti-anginal drugs.

1.4.14 Consider adding a third anti-anginal drug only when:

- the person's symptoms are not satisfactorily controlled with two anti-anginal drugs **and**
- the person is waiting for revascularisation or revascularisation is not considered appropriate or acceptable.

  Decide which drug to use based on comorbidities, contraindications, the person's preference and drug costs.

1.5 Investigation and revascularisation

People with stable angina whose symptoms are not satisfactorily controlled with optimal medical treatment

1.5.1 Consider revascularisation (coronary artery bypass graft [CABG] or percutaneous coronary intervention [PCI]) for people with stable angina whose symptoms are not satisfactorily controlled with optimal medical treatment.

1.5.2 Offer coronary angiography to guide treatment strategy for people with stable angina whose symptoms are not satisfactorily controlled with optimal medical treatment. Additional non-invasive or invasive functional testing may be required to evaluate angiographic findings and guide treatment decisions. [This recommendation partially updates recommendation 1.2 of Myocardial perfusion scintigraphy for the diagnosis and management of angina and myocardial infarction (NICE technology appraisal guidance 73).]

1.5.3 Offer CABG to people with stable angina and suitable coronary anatomy when:

- their symptoms are not satisfactorily controlled with optimal medical treatment **and**
- revascularisation is considered appropriate **and**
- PCI is not appropriate.

1.5.4 Offer PCI to people with stable angina and suitable coronary anatomy when:

- their symptoms are not satisfactorily controlled with optimal medical treatment **and**

- revascularisation is considered appropriate **and**
- CABG is not appropriate.

1.5.5 When either procedure would be appropriate, explain to the person the risks and benefits of PCI and CABG for people with anatomically less complex disease whose symptoms are not satisfactorily controlled with optimal medical treatment. If the person does not express a preference, take account of the evidence that suggests that PCI may be the more cost-effective procedure in selecting the course of treatment.

1.5.6 When either procedure would be appropriate, take into account the potential survival advantage of CABG over PCI for people with multivessel disease whose symptoms are not satisfactorily controlled with optimal medical treatment and who:

- have diabetes **or**
- are over 65 years **or**
- have anatomically complex three-vessel disease, with or without involvement of the left main stem.

1.5.7 Consider the relative risks and benefits of CABG and PCI for people with stable angina using a systematic approach to assess the severity and complexity of the person's coronary disease, in addition to other relevant clinical factors and comorbidities.

1.5.8 Ensure that there is a regular multidisciplinary team meeting to discuss the risks and benefits of continuing drug treatment or revascularisation strategy (CABG or PCI) for people with stable angina. The team should include cardiac surgeons and interventional cardiologists. Treatment strategy should be discussed for the following people, including but not limited to:

- people with left main stem or anatomically complex three-vessel disease

- people in whom there is doubt about the best method of revascularisation because of the complexity of the coronary anatomy, the extent of stenting required or other relevant clinical factors and comorbidities.

1.5.9 Ensure people with stable angina receive balanced information and have the opportunity to discuss the benefits, limitations and risks of continuing drug treatment, CABG and PCI to help them make an informed decision about their treatment. When either revascularisation procedure is appropriate, explain to the person:

- The main purpose of revascularisation is to improve the symptoms of stable angina.
- CABG and PCI are effective in relieving symptoms.
- Repeat revascularisation may be necessary after either CABG or PCI and the rate is lower after CABG.
- Stroke is uncommon after either CABG or PCI, and the incidence is similar between the two procedures.
- There is a potential survival advantage with CABG for some people with multivessel disease.

1.5.10 Inform the person about the practical aspects of CABG and PCI. Include information about:

- vein and/or artery harvesting
- likely length of hospital stay
- recovery time
- drug treatment after the procedure.

People with stable angina whose symptoms are satisfactorily controlled with optimal medical treatment

1.5.11 Discuss the following with people whose symptoms are satisfactorily controlled with optimal medical treatment:

- their prognosis without further investigation
- the likelihood of having left main stem disease or proximal three-vessel disease
- the availability of CABG to improve the prognosis in a subgroup of people with left main stem or proximal three-vessel disease
- the process and risks of investigation
- the benefits and risks of CABG, including the potential survival gain.

1.5.12 After discussion (see 1.5.11) with people whose symptoms are satisfactorily controlled with optimal medical treatment, consider a functional or non-invasive anatomical test to identify people who might gain a survival benefit from surgery. Functional or anatomical test results may already be available from diagnostic assessment. [This recommendation partially updates recommendation 1.2 of Myocardial perfusion scintigraphy for the diagnosis and management of angina and myocardial infarction (NICE technology appraisal guidance 73).]

1.5.13 After discussion (see 1.5.11) with people whose symptoms are satisfactorily controlled with optimal medical treatment, consider coronary angiography when:

- functional testing indicates extensive ischaemia or non-invasive anatomical testing indicates the likelihood of left main stem or proximal three-vessel disease **and**
- revascularisation is acceptable and appropriate.

1.5.14 Consider CABG for people with stable angina and suitable coronary anatomy whose symptoms are satisfactorily controlled with optimal medical treatment, but coronary angiography indicates left main stem disease or proximal three-vessel disease.

1.6 Pain interventions

1.6.1 Do not offer the following interventions to manage stable angina:

- transcutaneous electrical nerve stimulation (TENS)

- enhanced external counterpulsation (EECP)
- acupuncture.

1.7 Stable angina that has not responded to treatment

1.7.1 Offer people whose stable angina has not responded to drug treatment and/or revascularisation comprehensive re-evaluation and advice, which may include:

- exploring the person's understanding of their condition
- exploring the impact of symptoms on the person's quality of life
- reviewing the diagnosis and considering non-ischaemic causes of pain
- reviewing drug treatment and considering future drug treatment and revascularisation options
- acknowledging the limitations of future treatment
- explaining how the person can manage the pain themselves
- specific attention to the role of psychological factors in pain
- development of skills to modify cognitions and behaviours associated with pain.

1.8 Cardiac syndrome X

1.8.1 In people with angiographically normal coronary arteries and continuing anginal symptoms, consider a diagnosis of cardiac syndrome X.

1.8.2 Continue drug treatment for stable angina only if it improves the symptoms of the person with suspected cardiac syndrome X.

1.8.3 Do not routinely offer drugs for the secondary prevention of cardiovascular disease to people with suspected cardiac syndrome X.

[1] When combining a calcium channel blocker with a beta blocker, use a dihydropyridine calcium channel blocker, for example, slow release nifedipine, amlodipine or felodipine.

[2] When combining ivabradine with a calcium channel blocker, use a dihydropyridine calcium channel blocker, for example, slow release nifedipine, amlodipine, or felodipine.

2 Notes on the scope of the guidance

NICE guidelines are developed in accordance with a scope that defines what the guideline will and will not cover.

The following groups are covered in the guideline:

a) Adults (18 years and older) who have been diagnosed with stable angina due to atherosclerotic disease

b) The following subgroups were included:

- people of south Asian origin
- people older than 85 years
- people with chronic refractory angina
- people with diabetes
- people with normal or minimally diseased coronary arteries
- women.

Groups that are not covered in the guideline:

a) People with recent-onset chest pain or discomfort of suspected cardiac origin.

b) People with acute coronary syndrome.

c) People with chest pain or discomfort of unknown cause.

d) People with angina-type pain that is likely to be due to non-cardiac disease, such as anaemia.

e) People with angina-type pain associated with other types of heart disease, such as valvular heart disease (for example, aortic stenosis) or cardiomyopathy (for example, hypertrophic cardiomyopathy).

How this guideline was developed

NICE commissioned the National Clinical Guideline Centre to develop this guideline. The Centre established a Guideline Development Group (see appendix A), which reviewed the evidence and developed the recommendations. An independent Guideline Review Panel oversaw the development of the guideline (see appendix B).

There is more information about how NICE clinical guidelines are developed on the NICE website and in How NICE clinical guidelines are developed: an overview for stakeholders, the public and the NHS.

3 Implementation

NICE has developed tools to help organisations implement this guidance.

4 Research recommendations

The Guideline Development Group has made the following recommendations for research, based on its review of evidence, to improve NICE guidance and patient care in the future.

4.1 Adding a newer anti-anginal drug to a calcium channel blocker

What is the clinical and cost effectiveness of adding a newer anti-anginal drug (nicorandil, ivabradine or ranolazine) to a calcium channel blocker for treating stable angina?

Why this is important

We do not know the long-term clinical and cost effectiveness of adding a newer anti-anginal drug to a calcium channel blocker in people with stable angina. We propose a double-blind placebo-controlled randomised trial comparing the addition of a newer anti-anginal drug to a calcium channel blocker with a calcium channel blocker alone in people with stable angina whose symptoms are not being controlled. Endpoints would include symptom severity, quality of life, long-term morbidity and mortality, and cost effectiveness. The results of the trial would influence clinical practice and inform future updates of key recommendations in this guideline.

4.2 Management of stable angina in people with evidence of ischaemia on non-invasive functional testing

Do people with stable angina and evidence of reversible ischaemia on non-invasive functional testing who are on optimal drug treatment benefit from routine coronary angiography with a view to revascularisation?

Why this is important

Revascularisation has traditionally been offered to people with stable angina who have evidence of reversible ischaemia on non-invasive functional testing. Recent trials in people with stable angina (COURAGE, BARI-2D, MASS II) have not shown survival benefit from revascularisation compared with drug treatment. In the nuclear substudy of COURAGE (n = 314), PCI was shown to be more effective in treating ischaemia than optimal drug treatment, and in multivariate

analyses reduction of ischaemia was associated with greater event-free survival. It is unclear, however, whether people on optimal drug treatment who have evidence of inducible ischaemia on non-invasive functional testing should routinely have coronary angiography and revascularisation. This question is particularly relevant for people who have responded adequately (for example Canadian Cardiovascular Class 1 or 2) to optimal drug treatment and in whom, based on symptoms alone, revascularisation is not indicated. To answer this question we recommend a randomised trial of interventional management versus continued drug treatment in people with stable angina and myocardial ischaemia on non-invasive functional testing, with all-cause mortality and cardiovascular mortality as the primary endpoints.

4.3 Early revascularisation strategy for people with angina and multivessel disease

In people with stable angina and multivessel disease (including left main stem disease) whose symptoms are controlled with optimal drug treatment, would an initial treatment strategy of revascularisation be clinically and cost effective compared with continued drug treatment?

Why this is important

Research is needed to determine whether early investigation and revascularisation can improve longer term survival. People with stable angina may be disadvantaged if they do not have tests to identify whether they have a higher risk profile for early cardiac death, which could be reduced by revascularisation. This disadvantage could be magnified when people who are deemed to fall into very high risk groups (for example, left main stem stenosis > 50% in the MASS II trial) are excluded from randomised trials, resulting in the benefits of revascularisation being underestimated. We propose a randomised trial comparing an initial strategy of revascularisation (CABG or PCI) with an initial strategy of continued drug treatment in people with multivessel disease (including left main stem disease) in whom revascularisation is not needed for symptom relief. The trial should use drug-eluting stents and wider inclusion criteria than BARI-2D and COURAGE.

4.4 Cardiac rehabilitation

Is an 8-week, comprehensive, multidisciplinary, cardiac rehabilitation service more clinically and cost effective for managing stable angina than current clinical practice?

Why this is important

Cardiac rehabilitation programmes are an established treatment strategy for certain heart conditions, such as for people who have had a heart attack. However, there is no evidence to suggest that cardiac rehabilitation is clinically or cost effective for managing stable angina. Research to date has looked at short-term outcomes, such as a change in diet or exercise levels, but the effect on morbidity and mortality has not been studied. A randomised controlled trial is required to compare comprehensive cardiac rehabilitation with standard care in people with stable angina, with measures of angina severity (exercise capacity, angina frequency, use of a short-acting nitrate), and long-term morbidity and mortality as endpoints.

4.5 Patient self-management plans

What is the clinical and cost effectiveness of a self-management plan for people with stable angina?

Why this is important

Stable angina is a chronic condition. Evidence suggests that addressing people's beliefs and behaviours in relation to angina may improve quality of life, and reduce morbidity and use of resources. Self-management plans could include: educating people with stable angina about the role of psychological factors in pain and pain control; and teaching people self-management skills to modify cognitions, behaviours and affective responses in order to control chest pain. These skills may include pacing of physical activities, modifying stress using cognitive reframing and problem-solving techniques, and relaxation training or mindfulness techniques. The proposed study is a randomised controlled trial in primary care that would assess the clinical and cost effectiveness of self-management plans. This research would inform future updates of key recommendations in the guideline. Furthermore the research would be relevant to a national priority area (National service framework for coronary heart disease [NSF CHD] chapter 4: stable angina and chapter 7: cardiac rehabilitation) as well as the Coalition White Paper 2010 (Equity and excellence: liberating the NHS) that emphasise the importance of increasing people's choice and control in managing their condition.

5 Other versions of this guideline

5.1 Full guideline

The full guideline, Management of stable angina, contains details of the methods and evidence used to develop the guideline. It is published by the National Clinical Guideline Centre.

5.2 Information for the public

NICE has produced information for the public explaining this guideline.

We encourage NHS and voluntary sector organisations to use text from this information in their own materials about stable angina.

6 Related NICE guidance

Published

- Hypertension (update). NICE clinical guideline 127 (2001).
- Off-pump coronary artery bypass grafting. NICE interventional procedure guidance 377 (2011).
- Chronic heart failure (partial update). NICE clinical guideline 108 (2010).
- Chest pain of recent onset. NICE clinical guideline 95 (2010).
- Unstable angina and NSTEMI. NICE clinical guideline 94 (2010).
- Endoscopic saphenous vein harvest for coronary artery bypass grafting. NICE interventional procedure guidance 343 (2010).
- Prevention of cardiovascular disease at population level. NICE public health guidance 25 (2010).
- Depression in chronic health problems. NICE clinical guideline 91 (2009).
- Medicines adherence. NICE clinical guideline 76 (2009).
- Percutaneous laser revascularisation for refractory angina pectoris. NICE interventional procedure guidance 302 (2009).
- Transmyocardial laser revascularisation for refractory angina pectoris. NICE interventional procedure guidance 301 (2009).
- Spinal cord stimulation for chronic pain of neuropathic or ischaemic origin. NICE technology appraisal guidance 159 (2008).
- Drug-eluting stents for the treatment of coronary artery disease (part review of NICE technology appraisal guidance 71). NICE technology appraisal guidance 152 (2008).
- Lipid modification. NICE clinical guideline 67 (2008).
- Smoking cessation services (2008). NICE public health guidance 10.

- Ezetimibe for the treatment of primary (heterozygous-familial and non-familial) hypercholesterolaemia. NICE technology appraisal guidance 132 (2007).
- MI: secondary prevention. NICE clinical guideline 48 (2007).
- Varenicline for smoking cessation. NICE technology appraisal guidance 123 (2007).
- Hypertension. NICE clinical guideline 34 (2006).
- Statins for the prevention of cardiovascular events. NICE technology appraisal guidance 94 (2006).
- Intraoperative fluorescence angiography in coronary artery bypass grafting. NICE interventional procedure guidance 98 (2004).
- Myocardial perfusion scintigraphy for the diagnosis and management of angina and myocardial infarction. NICE technology appraisal guidance 73 (2003).
- Guidance on the use of coronary artery stents. NICE technology appraisal guidance 71 (2003).

7 Updating the guideline

NICE clinical guidelines are updated so that recommendations take into account important new information. New evidence is checked 3 years after publication, and healthcare professionals and patients are asked for their views; we use this information to decide whether all or part of a guideline needs updating. If important new evidence is published at other times, we may decide to do a more rapid update of some recommendations. Please see our website for information about updating the guideline.

Appendix A: The Guideline Development Group, National Clinical Guideline Centre and NICE project team

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Ruraidh Hill Technical Lead

Stefanie Reken (until January 2011) Health Economist

Prashanth Kandaswamy (from January 2011) Health Economist

Ann Greenwood Editor

Appendix B: The Guideline Review Panel

The Guideline Review Panel is an independent panel that oversees the development of the guideline and takes responsibility for monitoring adherence to NICE guideline development processes. In particular, the panel ensures that stakeholder comments have been adequately considered and responded to. The panel includes members from the following perspectives: primary care, secondary care, lay, public health and industry.

Robert Walker General Practitioner, Workington

Robin Beale Consultant in Accident and Emergency Medicine, Isle of Wight

Ailsa Donnelly Lay member

Mark Hill Head of Medical Affairs, Novartis Pharmaceuticals UK Ltd

John Harley Clinical Governance and Prescribing Lead and General Practitioner, North Tees PCT

Appendix C: The algorithm

The algorithm for the management of stable angina can be found in the NICE pathway on stable angina.

About this guideline

NICE clinical guidelines are recommendations about the treatment and care of people with specific diseases and conditions in the NHS in England and Wales.

The guideline was developed by the National Clinical Guideline Centre for Acute and Chronic Conditions. The Centre worked with a group of healthcare professionals (including consultants, GPs and nurses), patients and carers, and technical staff, who reviewed the evidence and drafted the recommendations. The recommendations were finalised after public consultation.

The methods and processes for developing NICE clinical guidelines are described in The guidelines manual.

This guideline partially updates recommendation 1.2 of NICE technology appraisal guidance 73 (published September 2008).

We have produced information for the public explaining this guideline. Tools to help you put the guideline into practice and information about the evidence it is based on are also available.

Changes after publication

January 2012: minor maintenance

December 2012: licensing information for nicorandil has been updated

March 2013: minor maintenance

October 2013: minor maintenance

Your responsibility

This guidance represents the view of NICE, which was arrived at after careful consideration of the evidence available. Healthcare professionals are expected to take it fully into account when exercising their clinical judgement. However, the guidance does not override the individual responsibility of healthcare professionals to make decisions appropriate to the circumstances of

the individual patient, in consultation with the patient and/or guardian or carer, and informed by the summary of product characteristics of any drugs they are considering.

Implementation of this guidance is the responsibility of local commissioners and/or providers. Commissioners and providers are reminded that it is their responsibility to implement the guidance, in their local context, in light of their duties to avoid unlawful discrimination and to have regard to promoting equality of opportunity. Nothing in this guidance should be interpreted in a way that would be inconsistent with compliance with those duties.

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