Management of stable angina

Drug treatment

Care pathway

Stable angina diagnosed in line with 'Chest pain of recent onset' (NICE clinical guideline 95)

- Offer advice, information and support (see box 1)
- Take into account general principles for treating stable angina (see box 2).
- Offer a short-acting nitrate (see box 3).
- Offer optimal drug treatment (one or two anti-anginal drugs as necessary plus drugs for secondary prevention of cardiovascular disease; see box 4).
- Offer either a beta blocker or calcium channel blocker as first-line treatment, based on comorbidities, contraindications and the person's preference.
- Do not routinely offer other anti-anginal drugs as first-line treatment.

If either a beta blocker or calcium channel blocker does not satisfactorily control symptoms, consider the other option (that is, calcium channel blocker or beta blocker) or consider both drugs together¹ If a calcium channel blocker is contraindicated or not tolerated, consider a beta blocker If a beta blocker is contraindicated or not tolerated, consider a calcium channel blocker

- If symptoms are not satisfactorily controlled, consider adding:
- a long-acting nitrate or
- ivabradine² or
- nicorandil³ or
- ranolazine.
- Decide which drug based on comorbidities, contraindications, person's preference and drug costs.

- If both beta blockers and calcium channel blockers are contraindicated or not tolerated, consider monotherapy with:
 - a long-acting nitrate or
 - ivabradine or
 - nicorandil or
 - ranolazine.
- Decide which drug based on comorbidities, contraindications, person's preference and drug costs.

Revascularisation

Symptoms satisfactorily controlled with optimal drug treatment (see box 4)

- Discuss:
 - the prognosis without further investigation
 - the likelihood of having left main stem or proximal three-vessel disease
 - coronary artery bypass graft (CABG) surgery to improve the prognosis in left main stem or proximal three-vessel disease
 - the process and risks of investigation
 - the benefits and risks of CABG, including potential survival gain.
- After discussion consider:
 - a functional or non-invasive anatomical test to identify people who might benefit from surgery⁴. Results may be available from diagnostic assessment
 - coronary angiography if the test shows extensive ischaemia or likely left main stem or proximal three-vessel disease, and revascularisation is acceptable and appropriate
 - CABG if coronary angiography shows left main stem or proximal three-vessel disease and the coronary anatomy is suitable.

Symptoms not satisfactorily controlled with optimal drug treatment (see box 4)

- Consider revascularisation (coronary artery bypass graft [CABG] or percutaneous coronary intervention [PCI]).
- Offer coronary angiography to guide treatment strategy.
- Additional non-invasive or invasive functional testing may be needed⁴.
- Consider the risks and benefits of continuing drug treatment or performing revascularisation and provide information (see boxes 5 and 6).
- If the coronary anatomy is suitable and revascularisation is appropriate:
 - offer CABG if PCI is not appropriate
 - offer PCI if CABG is not appropriate.
- If either CABG or PCI is appropriate take into account:
 - that for people with anatomically less complex disease who do not have a preference for one procedure PCI may be more cost effective
 - the potential survival advantage of CABG for people with multivessel disease who:
 - have diabetes or
 - are over 65 or
 - have anatomically complex three-vessel disease, with or without involvement of the left main stem.

- If stable angina does not respond to drug treatment and/or revascularisation, re-evaluate. This may include:
 - exploring the person's understanding of their condition and the impact of symptoms on quality of life
 - reviewing the diagnosis and considering non-ischaemic causes
 - reviewing drug treatment and considering future drug treatment and revascularisation options
 - acknowledging the limitations of further treatment
 - explaining how the person can manage their pain themselves
 - specific attention to the role of psychological factors in pain
 - developing skills to modify cognitions and behaviours associated with pain.
- Consider cardiac syndrome X in people with angiographically normal coronary arteries and continuing anginal symptoms:
 - continue drug treatment for stable angina if symptoms improve
 - do not routinely offer drugs for secondary prevention of cardiovascular disease.

Management of stable angina

Re-evaluation

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.

³ At the time of publication (July 2011), nicorandil did not have UK marketing authorisation for this indication. Informed consent should be obtained and documented.

⁴ This partially updates recommendation 1.2 of 'Myocardial perfusion scintigraphy for the diagnosis and management of angina and myocardial infarction' (NICE technology appraisal guidance 73).