Bradford and Airedale Guidelines for the Diagnosis and Management of Stable Angina

Prevalence 1.14% equivalent to approximately 23 patients for the average practitioner with 2000 patients

Angina is a symptom which often but not always represents obstructive coronary disease. A diagnosis of stable angina should be considered if the patients presents with the following (D):

Temporary episodes of crushing discomfort / tightness of central chest, often associated with breathlessness with or without radiation to:
- Arms
- Neck
- Teeth/jaw
- Back

Symptoms may be brought on as a result of:
- Physical exertion
- Emotional states
- Cold weather
- A heavy meal

To help reinforce a clinical suspicion of coronary artery disease a full assessment of the patient should be undertaken. This should include a clinical history, examination and investigations. The assessment should be undertaken and where appropriate acted upon and recorded within one month of the patient's initial presentation.

ASSESSMENT

Clinical History

- Frequency and intensity of symptoms (D)
- Prescribed / OTC medication
- Lifestyle risk factor assessment (A):
  - Smoking
  - Diet
  - Occupation
  - Exercise levels
  - History of hypertension
- Other risk factor assessment (A):
  - Age
  - Sex
  - Ethnic group
  - Premature menopause
  - Family history of premature CHD i.e. first degree relative (men <55 years and women <65 years)
  - Relevant past medical history e.g. Previous M.I.
  - Major co-existing disease e.g. Diabetes

Examination

- A general examination (D) to assess for example:
  - Anaemia
  - Hyper / hypo thyroidism
  - Carotid bruit
  - Oedema
- Check blood pressure (A)
- Assess Body Mass Index (BMI) (D)
- Check pulse and undertake auscultation of heart / chest (D) for evidence of cardiac damage and co-existent valvular disease. For example:
  - Heart failure
  - Aortic stenosis
  - Hypertrophic cardiomyopathy
  - Cardiac dysrhythmia

Investigations

- The following tests should be undertaken, but where clinically indicated referral should not be delayed.
  - Haemoglobin (D)
  - Random blood glucose (D)
  - Random total cholesterol (A)
  - Thyroid function (D)
  - Resting 12 lead ECG (B)

  NB: A normal ECG does not preclude a diagnosis of angina

Primary Care
For a list of primary care providers of ECG services, please contact Helen Guerin at Bradford Health Authority. Tel: 01274 366007/6215

Bradford Hospital Trust
Bradford Royal Infirmary offers an open access ECG service from 10am - 4pm Mon - Fri. For GPs seeking interpretation of ECG results undertaken in their practice, Cardiologists will report on those, which are faxed to them. Fax: 01274 364741 Tel: 01274 364073

Airedale Hospital Trust
An open access service is not available. For GPs seeking interpretation of ECG results, Cardiologists will report on those, which are faxed to them. Fax: 01535 292019 Tel: 01535 292018

ELECTIVE REFERRALS TO THE CARDIOLOGIST SHOULD FALL INTO THE CATEGORIES BELOW

To determine if the patient would benefit from prognostic investigation and treatment

- Patients with clinically certain angina requiring exercise ECG to determine their prognostic group (B)

Management advice

- Angina symptoms are worsening despite appropriate treatment (D)
- Angina patient not adequately controlled on full doses of two drugs (D)

Establish diagnosis

- Angina is suspected and clarification of diagnosis is sought (D)

There is no upper age limit for someone with very severe or uncontrollable symptoms. (D)

NB: The district's strategic group (The ABCHD group) has been tasked with reviewing, improving and co-ordinating delivery of CHD services. These guidelines will be updated in the light of changes.

Developed from recommendations based on the North of England Angina Guidelines and the Joint Working Party of the British Cardiac Society and Royal College of Physicians

Grading of the evidence: (A) randomised control trials (B) controlled studies (C) robust experimental or observational studies (D) national expert consensus opinion

Management of patients with stable angina

To improve the quality of life for patients with stable angina, it is important that health professionals involve patients in their care. This can be achieved for example by:

- *Jointly setting transitional targets and recording progress towards an evidence based target.*
- Ensuring that advice and treatment offered to patients is recorded and supported with literature e.g. Patient Held Record Card.

NB. Stable angina can become unstable again and the level of intervention will need to change to reflect this.

Drug summary

Recommendations and contra indications outlined in the BNF apply for all drugs

Within any drug class the patient should be treated with the most cost effective preparation that they can comply with and that controls their symptoms D

Enquiries should always be made regarding compliance and any side effects patients may be experiencing D

Secondary prophyiaxis

- Treat with aspirin *soluble* 75mg daily A
- If indicated consider lipid lowering treatment e.g. statin

Initial symptomatic treatment

- Treat with short acting nitrates prn in response to pain and precipitants A

Regular symptomatic treatment

Monotherapy

There is no strong evidence that one class of drug is better than another

- ß blockers are usually considered first line treatment D
- The dose should be increased to obtain maximum benefit by the patient D
- Patients should be warned not to stop ß blockers or run out of tablets B
- If ß blockers need to be stopped they should be tailed off D

- Patients intolerant of ß blockers consider
  - Rate lowering calcium antagonist e.g. verapamil or diltiazem
  - Nitrates
  - Potassium channel activators

If nitrates are used it should be in a way that avoids nitrate tolerance A, i.e. once daily nitrate or asymmetrical dosing (e.g. 9am & 2pm). Nitrate patches should be used in dosages of at least 10mg A

Choosing a second drug

There is no strong evidence regarding which class of drug to use. Assessment of the patients' clinical condition should help dictate management. Caution is advised with adding verapamil or diltiazem to a ß blocker. (Please refer to BNF)

Choosing a third drug

If not controlled on maximal therapeutic doses of two regular symptomatic drugs, give a third drug and refer D

Read Codes

	Read 1 (4 Byte)	Read 2 (5 Byte)
CHD	G4	G3
Angina pectoris	G44	G33
Aspirin prophylaxis HD - i.e. asprin self medicating or prescribed	8B633	8B633
Aspirin adverse reaction	U6051	U6051
ECG	321	321
Exercise ECG	3213	3213
Smoking	137+	137+

Annual review

Evidence based targets

Smoking - advise patients to stop smoking and stay away from others who smoke A
Nicotine replacement therapy (NRT) can be used safely and is effective in patients who are motivated to stop A *Refer to local PACE smoking guidelines.*

Blood Pressure A - aim to control below 140/85mmHg.
Blood pressure monitoring will vary depending on the level of control achieved. Refer to local PACE hypertension guidelines.

Lipids A - aim for a total cholesterol below 5mmol/L and a LDL-C level at or below 3mmol/L or lowered by 30% whichever is the greater.
Consider lifestyle advice and lipid lowering treatment if indicated A *e.g. statin. Reinforce drug treatment may mean long life therapy. The response to therapy should initially be monitored every 3 months until controlled, then annually, adjusting treatment as required.*

Diet - advise patients to eat less saturated fat and salt, two weekly portions of oily fish A and at least 5 daily portions (1lb in total) of fruit and vegetables.
Consider dietetic referral.

BMI - aim for a BMI as close to BMI 20-25 range as is practicable. Hypertensive A and normotensive C patients who are overweight should be encouraged to reduce weight.

Physical activity C - encourage regular physical activity within the limits of the patient's angina symptoms. Activity should feel moderate for them and not uncomfortable.
Advise patients to:
Start with low grade activity e.g. walking, gradually increasing in duration, frequency and intensity
Avoid activity shortly after eating and in extremely cold weather
Stop activity if experiencing angina symptoms or breathlessness
Consider referral to the local GP exercise referral scheme - BEEP.

Aspirin - treat all patients with 75mg daily A unless contra-indicated.

GTN - advise GTN is taken in response to pain and prior to precipitating factors A
Once opened tablets should be replaced within eight weeks opening.

Education - re unstable angina. Advise about symptoms of heart attack and should they *develop, to seek help rapidly by telephoning '999'.*

Diabetes - aim for optimal control D
Refer to local PACE diabetes guidelines

Screening - aim to screen first degree blood relatives (aged 18 years or older) of patients with premature angina for CHD risk factors D.

Additional information

- **Occupation - special rules apply regarding safety in 'critical work' such as merchant seamen/LGV/PCG drivers**
- **Driving - be familiar with the DVLA regulations on 'medical fitness to drive.' (DVLC tel. 01792 772151)**
- **Bradford Heart Support Group - meet at Field House, Bradford Royal Infirmary at 7.30pm on the first Tues in the month. Tel 01274 364565.**
- **Airedale Cardiac Support Group - contact the Intensive Care Unit for a programme. Tel 01535 652511.**

Adapted for local use across Bradford and Airedale Health Authority District by BHT, AHT, BHA, MAAG/PACE, and local PCGs. Developed: Feb 2000