

Review Article

Angina Pectoris and Homoeopathy

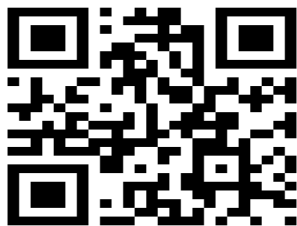
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ABSTRACT

Angina pectoris is defined as substernal chest pain, pressure, or discomfort that is typically exacerbated by exertion and/or emotional stress, lasts greater than 30 to 60 seconds, and is relieved by rest and nitroglycerin¹. Clinical randomized trials have shown that an invasive strategy of coronary revascularization (except acute STEMI) and after excluding patients who had significant CAD (> 50% left main narrowing or proximal 3 vessel disease), is not superior to optimal medical therapy. None of the antianginal drugs (with the possible exception of nicorandil) have been proven to reduce cardiovascular mortality or myocardial infarction, despite the fact that they are equally effective in treating symptoms. An expert consensus document has been recently published with the proposition of an individualized approach to angina treatment, which takes into consideration the patients with or without their comorbidities and the underlying mechanism of disease.

Keywords: Angina, homoeopathy, cactus grandiflorus, digitalis, kalmia



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INTRODUCTION

Angina pectoris is due to myocardial ischemia and presents as a central chest tightness or heaviness, which is brought on by exertion and relieved by rest. It may radiate to one or both arms, the neck, jaw or teeth and may present with throat discomfort. Other precipitants: emotion, cold weather, and heavy meals.

Associated symptoms: dyspnoea, nausea, sweatiness, faintness.

Causes

Mostly atheroma. Rarely anaemia, AS, tachyarrhythmias, HCM, arteritis/ small vessel disease.

Symptoms

Angina is typically associated with exertion or emotional upset; relieved quickly by rest or nitroglycerin. Major risk factors are cigarette smoking, hypertension, hypercholesterolemia (↑LDL fraction; ↓HDL), diabetes, obesity, and family history

of CAD before age 55.

Types of angina

Stable angina	Unstable angina (crescendo)	Decubitus angina	Prinzmetal's angina
Induced by effort, relieved by rest	Angina of increasing frequency or severity, occurs on minimal exertion or at rest; associated with increased risk of MI	Precipitated by lying flat	Caused by coronary artery spasm

Tests

ECG: may show ST depression; flat or inverted T waves; signs of past MI-such as q waves.

2DECHO: To look for Regional wall motion abnormality(RWMA), corresponding to the vascular territory.

If resting ECG is normal consider exercise ECG.

Thallium scan, cardiac CT or coronary angiography.

Coronary Ca²⁺score measured by CT is a

strong predictor of CAD.

Stress echo can detect changes in regional wall motion seen during ischaemia.

Exclude precipitating factors: anaemia, diabetes, hyperlipidaemia, thyrotoxicosis, temporal arteritis.

Stress Testing

Enhances diagnosis of CAD. Exercise is performed on tread- mill or bicycle until target heart rate is achieved or patient becomes symptomatic (chest pain, light-headedness, hypotension, marked dyspnoea) or develops diagnostic ST-segment changes. Useful information includes duration of exercise achieved; peak heart rate and BP; depth, morphology, and persistence of ST-segment depression; and whether and at which level of exercise pain, hypotension, or ventricular arrhythmias develop. Exercise testing with radionuclide, echocardiographic, or magnetic resonance imaging increases sensitivity and specificity and is particularly useful if baseline ECG abnormalities prevent interpretation of test. Note: Exercise testing should not be performed in pts with acute MI, unstable angina, or severe aortic stenosis/ HOCM. If the patient is unable to exercise, pharmacologic stress with IV dipyridamole (or adenosine) or dobutamine can be performed in conjunction with radionuclide or echocardiographic imaging. Patients with LBBB on baseline ECG should be referred for adenosine or dipyridamole radionuclide imaging, which is most specific for diagnosis of CAD in this setting. The prognostic utility of coronary calcium detection (by electron-beam or multidetector CT) in the diagnosis of CAD has not yet been fully characterized. Some pts do not experience chest pain during ischemic episodes with exertion (“silent ischemia”) but are identified by transient ST-T-wave abnormalities during stress.

Treatment

Identify and treat risk factors: mandatory cessation of smoking; treatment of diabetes, hypertension, and lipid disorders advocate a diet low in saturated fat and trans fats.

Correct exacerbating factors contributing to angina: morbid obesity, CHF, anemia, hyperthyroidism.

Reassurance and patient education.

STRESS TESTING RECOMMENDATIONS	
Subgroup	Recommended Study
Pt able to exercise	Standard exercise test (treadmill, bicycle, or arm ergometry)
If baseline ST-T on ECG is normal	Standard exercise test (above) combined with
If baseline ST-T impairs test interpretation (e.g., LVH with strain, digoxin)	<i>either</i> Perfusion scintigraphy (thallium-201, ^{99m} Tc-sestamibi) <i>or</i> Echocardiography
Pt. <i>not</i> able to exercise (regardless of baseline ST-T abnormality)	Pharmacologic stress test (IV dobutamine, dipyridamole, or adenosine) combined with imaging: Perfusion scintigraphy [thallium 201, ^{99m} Tc-sestamibi, or PET (rubidium-82 or N-13 ammonia)] <i>or</i> Echocardiography <i>or</i> Cardiac MRI
LBBB on baseline ECG	Adenosine (or dipyridamole) ^{99m} Tc-sestamibi or PET scintigraphy

Drug therapy: Sublingual nitroglycerin (TNG 0.3–0.6 mg); may be repeated at 5-min intervals; warn pts of possible headache or light-headedness; teach prophylactic use of TNG prior to activity that regularly evokes angina. If chest pain persists for >10 min despite 2–3 TNG, pt should report promptly to nearest medical facility for evaluation of possible

unstable angina or acute MI.

Long-term angina suppression: The following classes of drugs are used, frequently in combination.

Long-Acting Nitrates May be administered by many routes start at the lowest dose and frequency to limit tolerance and side effects of headache, light-headedness, tachycardia.

Beta Blockers All have antianginal properties; β_1 -selective agents are less likely to exacerbate airway or peripheral vascular disease. Dosage should be titrated to resting heart rate of 50–60 beats/min. Contraindications to beta blockers include CHF, AV block, bronchospasm, “brittle” diabetes. Side effects include fatigue, broncho-spasm, depressed LV function, impotence, depression, and masking of hypoglycemia in diabetics.

Calcium Antagonists Useful for stable and unstable angina, as well coronary vasospasm. Combination with other antianginal agents is beneficial, but verapamil should be administered cautiously to pts on beta blockers (additive effects on slowing heart rate). Use sustained-release, not short-acting, calcium antagonists; the latter are associated with increased coronary mortality.

Ranolazine For pts who continue to experience stable angina despite the above standard medications, consider addition of ranolazine (500– 1000 mg PO bid), which reduces anginal frequency and improves exercise capacity without affecting blood

pressure or heart rate. Ranolazine is contraindicated in hepatic impairment, in pts with prolongation of the QTc interval, or in combination with drugs that inhibit its metabolism (e.g., ketoconazole, macrolide antibiotics, HIV protease inhibitors, diltiazem, and verapamil).

Aspirin 75–325 mg/d reduces the incidence of MI in chronic stable angina, following MI, and in asymptomatic men. It is recommended in pts with CAD in the absence of contraindications (GI bleeding or allergy). Consider clopidogrel (75 mg/d) for aspirin-intolerant individuals.

The addition of an ACE inhibitor is recommended in pts with CAD and LV ejection fraction <40%, hypertension, diabetes, or chronic kidney disease.

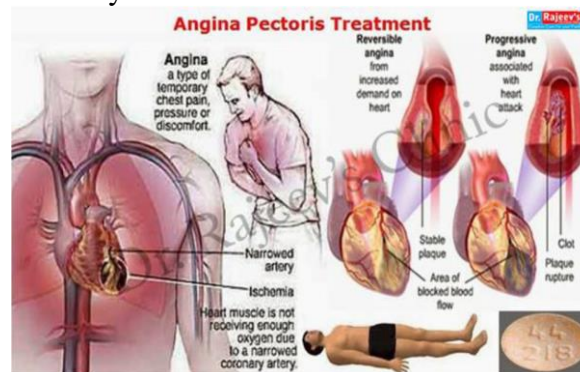
Mechanical revascularization

Used in conjunction with, not as replacement for, risk factor modification and medical therapies.

Percutaneous Coronary Intervention (PCI) Technique of balloon dilatation, usually with intracoronary stent implantation. Performed on anatomically suitable stenoses of native vessels and bypass grafts; more effective than medical therapy for relief of angina. Has not been shown to reduce risk of MI or death in chronic stable angina; should not be performed on asymptomatic or only mildly symptomatic individuals. With PCI initial relief of angina occurs in 95% of pts; however, restenosis develops in 30–45% following balloon dilatation alone, in ~20% after bare metal stenting, but in only <10% after drug-eluting stent (DES) implantation. Late stent thrombosis may occur rarely in pts with DES; it is diminished by prolonged antiplatelet therapy [aspirin indefinitely and clopidogrel (or alternate platelet ADP receptor antagonist) for a minimum of 12 months].

Coronary Artery Bypass Graft (CABG) Appropriately used for angina refractory to medical therapy or when the latter is not tolerated (and when lesions are not amenable to PCI) or if severe CAD is present (e.g., left main, three-vessel disease with impaired LV function). In type 2 diabetics with multivessel CAD, CABG plus optimal medical therapy is superior to medical

therapy alone in prevention of major coronary events.



Homoeopathic therapeutics

Bryonia Alba – pains are stitching and tearing in the region of heart, aggravated by motion, and better by rest and lying on painful side.

Digitalis – sensation as if heart would stop working, condition of patient is worse by motion. Pulse is slow

Crataegus – pain in the region of heart, and under left clavicle. Pulse, feeble, accelerated and irregular, Blueness of fingers and toes

Naja – severe pain in the region of the heart, extending to nape of the neck, pulse slow and irregular with fluttering and palpitation

Spigelia – shooting, stabbing pain with pressure and oppression in chest down the left arm. Acts well in smokers and drunkards. Is a useful remedy in anguishing substernal pain which radiates to neck and arms, irregular pulse, tendency to syncope, palpitation and sharp stitches in heart, pulse weak and irregular, or full and bounding with aggravation from the least motion

Cactus – excellent remedy of the cases of angina pectoris, constriction and congestion of the heart, marked palpitation with prostration

Veratrum album – heart action poor in tobacco chewers, much palpitation, anxiety and rapid respiration

Note: Angina is a serious medical condition and may require emergency intervention. If a patient suspect having angina pain, they should immediately consult a physician for proper diagnosis and treatment.

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