

The Atlantic Provinces Medical Peer Review



MANAGEMENT OF SPECIFIC DISEASE ENTITIES - Cardiology
1 - ANGINA

Risk Factors: family history; hyperlipidemia; hypertension; tobacco use; DM; male; age; obesity

Signs & Symptoms:

- ✓ precordial pressure or heaviness radiating to the back, neck or arms
- ✓ brought on by exertion, emotional stress, meals, cold air, or smoking; relieved by rest or nitrates
- ✓ discomfort may radiate to neck, lower jaw, teeth, shoulders and inner aspects of arms and back
- ✓ clenched fist over sternum; choking sensation on exertion; atypical symptoms in women, elderly and diabetics; may see dyslipidemia signs: xanthomas, carotid bruits, diminished pulses

Diagnosis:

- ✓ EKG & exercise stress treadmill testing; lipid profile
- ✓ stress echo, coronary angiography, stress scintigraphy
- ✓ differential diagnosis: GERD, esophageal spasm, PUD, GB, costochondritis, pericarditis, aortic dissection, pleurisy, pulmonary embolism or hypertension, pneumothorax, radiculoipathy, shoulder arthropathy, psychological

Therapies:

- ✓ smoking cessation; exercise program after physician approval
- ✓ low fat, salt, cholesterol diet; weight loss if required
- ✓ ASA; Beta blockers; Nitroglycerine; long-acting nitrates; HMG-COA reductase inhibitors for hyperlipidemia
- ✓ Ace inhibitors: CAD and other vascular disease, especially DM or left ventricular dysfunction
- ✓ consider Plavix for severe, diffuse CAD; Plavix for 12 months after stent placement
- ✓ surgery: CABG, angioplasty, stent placement
- ✓ follow-up: unstable symptoms warrant hospitalization for evaluation; monitoring based on frequency and severity of complaint

	N/A	E	S	D
Clinical history and physical exam are documented.				
It is evident that routine tests have been ordered and completed.				
Appropriate therapies are used and regularly reviewed.				

COMMENTS: _____

MANAGEMENT OF SPECIFIC DISEASE ENTITIES - Cardiology
2 -ATRIAL FIBRILLATION

Risk Factors: hypertension, DM, CAD, LVH, CHF, rheumatic heart disease; hyperthyroidism; post-surgical state_(cardiothoracic surgery)

Etiologies: HHD, valvular/rheumatic heart disease; CAD, acute MI, pulmonary embolus; cardiomyopathy, CHF, infiltrative heart
 associated conditions: WPW, sick sinus syndrome, atrial flutter

Signs & Symptoms:

- ✓ irregular pulse, tachycardia, heart failure, hypotension, palpitations, light-headedness
- ✓ fatigue, poor exercise capability, dyspnea, angina, syncope, stroke, arterial embolism

Diagnosis:

- ✓ EKG; Holter monitor; TSH for hyperthyroidism; PT/INR in patients on Warfarin
- ✓ Imaging: chest x-ray; echo, transesophageal echo
- ✓ differential diagnosis: multifocal atrial tachycardia; atrial flutter; sinus tachycardia with frequent atrial premature beats

Therapies:

- ✓ avoid triggers: ethanol, caffeine, nicotine
- ✓ prevent complications: anticoagulants, antibiotic prophylaxis if due to valvular heart disease
- ✓ control ventricular rate: Beta blockers, non-dihydropyridine calcium channel blockers, Digoxin
- ✓ conversion to sinus rhythm: DC cardioversion; chronic oral antiarrhythmic therapy; surgery; EP ablation
- ✓ follow-up: EKG, Holter to monitor rhythm; maintain INR at 2 - 3
- ✓ EKG to monitor QTC interval if on antiarrhythmic therapy; careful follow-up of antiarrhythmic drug

	N/A	E	S	D
Clinical history and physical exam are documented.				
It is evident that routine tests have been ordered and completed.				
Appropriate therapies are used and regularly reviewed.				

COMMENTS: _____

MANAGEMENT OF SPECIFIC DISEASE ENTITIES - #3 HYPERTENSION
Cardiology/Family Medicine/Internal Medicine/Nephrology

All patients with hypertension

- ✓ Blood pressure measured and recorded in all office visits and/or home 24 hr BP monitor
- ✓ Health Behaviour Management
 - Physical exercise 30 -60 minutes 4-7 days per week
 - Weight reduction
 - Alcohol 2 drinks or less per day, max 14 per week for men, 9 per week for women
 - DASH diet
 - Sodium restriction to less than 2 g of sodium per day
 - Stress management

Therapies

- ✓ Antihypertensives should be strongly considered for average
 - SBP > 160 mmHg or DBP > 100 mmHg in absence of other cardiovascular risk factors
 - SBP > 140 mmHg or DBP > 90 mmHg in the presence of macrovascular target organ damage or other independent cardiovascular risk factors
- ✓ Goals of treatment
 - SBP treatment goal < 140 mmHg, DBP treatment goal < 90 mmHg
 - In diabetic patients, SBP goal < 130 mmHg, DBP goal < 80 mmHG
- ✓ Choice of therapies
 - Initial therapy should be either
 - Thiazide / thiazide-like diuretic
 - B-blocker (in patients younger than 60, non-diabetic, non-asthmatic)
 - ACE inhibitor (in non-black patients)
 - Long-acting calcium channel blocker (CCB), or
 - ARB's
 - If failure of initial therapy, add-on drugs should be chosen from first line choices

Monitoring

- ✓ Side effects of medications, i.e. B-Blockers (bradycardia), ACE I and ARBs(creatinine and potassium checked 1-2 weeks after drug initiation); diuretics (hypokalemia)
 - potassium checked 1-2 weeks after drug initiation); diuretics (hypokalemia)

	N/A	E	S	D
There is evidence of treatment to targets and consistent long-term follow-up (BP monitoring; lifestyle issues)				
The appropriate therapies are being used.				
Regular monitoring and review of therapy and medications is evident.				

COMMENTS:

MANAGEMENT OF SPECIFIC DISEASE ENTITIES - # 4 - CONGESTIVE HEART FAILURE Cardiology/Family Medicine/Internal Medicine/
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All patients with heart failure:

- ✓ documentation of clinical history and physical exam: symptoms, functional limitations, risk factors, prior cardiac illness, co-morbidities, drugs, alcohol use
- ✓ routine tests including CBC, ECG, chest X-ray, renal function, urinalysis, glucose, lipids, liver enzymes and thyroid function; consider use of natriuretic peptide
- ✓ echocardiography recommended to assess ventricular and valvular function
- ✓ Manage contributing and associated conditions such as hypertension, myocardial ischemia, diabetes, thyroid dysfunction, and Reno vascular disease.

Therapies:

- ✓ lifestyle modification: smoking cessation, restriction of alcohol consumption, regular physical activity; no added salt diet; encourage daily morning weights
- ✓ referral to a heart function program
- ✓ flu shot and pneumococcal vaccine

Drug Therapies:

- ✓ cardiovascular risk factors should be aggressively managed with appropriate drugs
- ✓ all patients with heart failure and ejection fractions less than 40% should be on an ACE inhibitor with a beta blocker or carvedilol unless contraindications exist
- ✓ ARB's should be used if ACE I is not tolerated. Combining ACE inhibitors and ARBs should only be done with caution
- ✓ long-term monitoring of renal function and electrolytes needed with ACE I and ARB's
- ✓ loop diuretics recommended in patients with congestive symptoms
- ✓ electrolytes should be carefully monitored in patients on diuretics
- ✓ use of mineralocorticoid receptor antagonists in patients with EF < 30% if >55 years old or diabetic
- ✓ avoid use of NSAIDS, COX inhibitors, glitazones, non-dihydropyridine CCB's
- ✓ Omega 3 fatty acids 1g daily in patients with severe HF and reduced EF
- ✓ Patients with chronic atrial fibrillation should be on other NOAC

	N/A	E	S	D
Clinical history and physical exam are documented.				
It is evident that routine tests have been ordered and completed.				
Appropriate therapies are used and regularly reviewed.				

COMMENTS: _____

MANAGEMENT OF SPECIFIC DISEASE ENTITIES - Cardiology
5 -MITRAL REGURGITATION

Risk Factors: age, hypertension, rheumatic heart disease, endocarditis, anorectic drugs

Etiologies: acute MR: ruptured chordae tendinea, papillary muscle dysfunction due to acute MI or Ischemia
 chronic MR: MVP, CAD, HOCM, connective tissue disorder, infective endocarditis, congenital AV cushion defect, anorectic drugs

Signs & Symptoms:

- ✓ dyspnea, orthopnea, paroxysmal nocturnal dyspnea, fatigue, weakness, atrial fibrillation

Diagnosis:

- ✓ history and physical
- ✓ tests: EKG, chest x-ray, echo-cardiogram, transesophageal echo

Therapies:

- ✓ treat acute pulmonary edema, co-existent atrial fibrillation
- ✓ consideration of surgery where appropriate
- ✓ antibiotic prophylaxis when necessary ; anticoagulants when necessary
- ✓ follow-up: ongoing medical with consideration of serial chest x-ray, EKG, echo and/or exercise stress test

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COMMENTS: _____
