

Cardiovascular System Disorders

| Diagnostic Test | Adjunctive Management | Medication |
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| <p>A. Laboratory test</p> <ul style="list-style-type: none"> - Serum Electrolytes - ESR - C-reactive protein - Blood coagulation test <ol style="list-style-type: none"> 1. PTT- most significant if on heparin 2. PT-most significant if on warfarin 3. INR - BUN & Creatinine- increase in MI,CHF, Cardiomyopathy - Total serum cholesterol <ol style="list-style-type: none"> 1. LDL 2. HDL 3. Triglycerides - BNP- indicator for diagnosing HF (Critical value- >than 100pg/ml) - Enzymes test indicates death of myocardial muscle, heart attack <ol style="list-style-type: none"> 1. CK-MB within 4 to 6 hr following Mi & remains elevated from 24 to 72 hr. 2. Troponin- gold standard in diagnosing MI. It remains elevated fro 2 to 3 weeks following the event (NV <than 0.2ng/dl) 3. Myoglobin- rises in early in response to tissue injury within the ist 2 hrs. Declines after 7 hours. (more present in skeletal) | <p>A. Cardioversion</p> <ul style="list-style-type: none"> - Synchronized- time to coincide with the client's own cardiac cycle. <p>B. Defibrillation</p> <ul style="list-style-type: none"> - Used for VF or pulseless VT - Unsynchronized - Not effective for treatment of asystole <p>C. Pacemaker</p> <ol style="list-style-type: none"> 1. Permanent pacemakers (subcutaneous) <ul style="list-style-type: none"> - Observe for hiccups- signs of accidental dislodgement 2. Temporary pacemaker (Transvenous) 3. Settings: <ul style="list-style-type: none"> - Ventricular demand - Ventricular fixed - Dual chamber - Atrial demand - Variable rate | <p>A. Antihypertensives</p> <ol style="list-style-type: none"> 1. Angiotensin-Converting Enzymes (ACE) Inhibitors <ul style="list-style-type: none"> - Captopril - Enalapril - Enalaprilat (IV) - Fosinopril - Lisinopril 2. Angiotensin II receptor blockers (ARBs) <ul style="list-style-type: none"> - Losartan - Valsartan - Irbesartan 3. Calcium-Channel blockers <ul style="list-style-type: none"> - Nifedipne - Verapamil - Diltiazem - Amlodipine 4. Alpha Adrenergic Blockers (sympatholytics) <ul style="list-style-type: none"> - Prazosin - Doxazosin mesylate 5. Centrally Acting Alpha2 Agonist <ul style="list-style-type: none"> - Clonidine - Guanfacine HCl - Methyldopa 6. Beta Adrenergic Blockers (sympatholytics) <ol style="list-style-type: none"> a. Cardioselective Beta <ul style="list-style-type: none"> - Metoprolol - Atenolol - Metoprolol succinate b. Nonselective (Beta1 & Beta2) <ul style="list-style-type: none"> - Propranolol - Nadolol - Labetalol 7. Vasodilators <ul style="list-style-type: none"> - Nitroglycerin - Enalaprilat - Nitroprusside - Hydralazine |

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| <p>B. ECG</p> <ul style="list-style-type: none"> - T-wave inversion— Ischemia - ST-segment elevation - injury - Q-Wave enlargement —infarction <p>C. Cardiac Catherization</p> <ul style="list-style-type: none"> - Coronary Angioplasty - Coronary stent <p>D. Transesophageal echocardiogram (TEE)</p> <ul style="list-style-type: none"> - Visualize structures & function of the heart. - Used for diagnosis of HF & murmurs | | <p>B. Cardiac Glycosides</p> <ul style="list-style-type: none"> - Digoxin - Watch for toxicity - Hold if HR is > 60 (adult), > 70 (child), >90 (infant) <p>C. Antianginal</p> <ul style="list-style-type: none"> - Organic Nitrates <ul style="list-style-type: none"> -Sublingual tablet -Sustained-release tablet - Transdermal ointment - Transderm patch <p>D. Antidysrhythmic agents</p> <ol style="list-style-type: none"> 1. Adenosine -convert SVT To sinus 2. Amiodarone- VF, unstable VTACH 3. Atropine- Bradycardia <p>E Antilipemic medication</p> <ul style="list-style-type: none"> - Colestid - Welchol - Tricor - Lopid <p>F Stain medication</p> <ul style="list-style-type: none"> - Atorvastatin - Simvastatin - Lovastatin |
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| Cardiovascular Disorders | Valvular Disorders | Peripheral Vascular Disorders |
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| <p>A. Angina</p> <ul style="list-style-type: none"> - Chronic stable angina - Acute coronary syndrome - Types of angina <ol style="list-style-type: none"> a. Stable (exertional) angina b. Unstable (preinfarction) angina c. Variant (Prinzmetal's) angina | <p>A. Right-sided heart failure</p> <ul style="list-style-type: none"> - Mitral stenosis - Mitral regurgitation - Tricuspid stenosis <p>B. Left-sided heart failure</p> <ul style="list-style-type: none"> - Aortic stenosis - Aortic regurgitation <p>Management</p> <ol style="list-style-type: none"> 1. Valvuloplasty - watch for systemic emboli 2. Valve replacement <ol style="list-style-type: none"> a. Mechanical Require lifelong anticoagulants- | <p>A. Peripheral arterial disease</p> <ul style="list-style-type: none"> - Intermittent claudication - Shiny skin with hair loss & thickened toenails - Necrotic ulcers -no edema - Tingling & numbness of the toes - Cool extremities with poor pulses - Surgical treatment <ol style="list-style-type: none"> 1. Femoral popliteal |

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| <p>B. Myocardial Infarction</p> <ul style="list-style-type: none"> - “Time is muscle” - 90 minutes from ED door to needle door” - STEMI - NSTEMI <p>C. Heart Failure</p> <ul style="list-style-type: none"> - Left-sided heart failure = pulmonary congestion - Right-sided heart failure = Systemic congestion | <p style="text-align: center;">warfarin</p> <p>b. Biologic -require prophylactic anticoagulants for 3 months</p> <p>C. Aortic aneurysm</p> <ul style="list-style-type: none"> - Monitored until above 5 cm when the rate of rupture increases & surgery is needed. <p>D. Hypertension</p> <ul style="list-style-type: none"> - “silent killer” 1. Primary hypertension 2. Secondary hypertension | <p style="text-align: center;">bypass</p> <p>2. Angioplasty or stenting</p> <p>B. Peripheral venous disease</p> <ul style="list-style-type: none"> - Stasis dermatitis (brown discoloration) - Edema - Stasis ulcer (typically found around ankles) <p>C. Venous thromboembolism</p> <ul style="list-style-type: none"> - Edema of affected l |
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