

Severe Hypertension

**Prior to making a referral, call office or Doc Halo, to speak with a Cardiologist or APP to discuss patient and possible treatment options. Please only contact the patient's cardiologist. The cardiologists only see their own patients.*

Pre-referral considerations:

1. BP of arm and Leg
2. Ambulatory BP
3. Renal causes

Red Flags:

Head ache, neurological symptoms, refractory HTN when 3 antihypertensive medications are maxed.

Lab Studies: Recommended

1. CMP
2. Plasma renin activity
3. Serum Aldosterone
4. Plasma Metanephrines
5. Fasting Lipid Profile
6. TSH
7. Urinalysis
8. Urinary microalbumin/creatinine ratio

Testing Studies: Recommended

1. Echocardiogram
2. EKG
3. Ambulatory BP
4. Renal MRA or CTA
5. Renal US

Arrhythmias

How was arrhythmia diagnosed?

Pre-referral consideration:

1. Consider:
 - a. Cardiomyopathy
 - b. Valvular heart disease
2. ECG
3. Chest X-ray

Red Flags:

Pre-syncope, syncope and chest pain

Lab Studies: Recommended

1. CBC
2. BMP
3. TSH
4. Fasting Lipid Profile

Testing Studies: Recommended

1. Echocardiogram
2. ECG during SVT
3. 48 hr Holter Monitor
4. Zio Patch Event Monitor-if event was not documented

Prior Myocardial Infarction

Pre-referral consideration:

1. Consider:
 - a. Vascular disease
2. ECG
3. Chest X-ray

Red Flags:

Recurrent chest pain

Lab Studies: Recommended

1. CBC with Diff
2. UA
3. BMP
4. Fasting Lipid Profile

Testing Studies: Recommended

1. Exercise stress test for risk stratification-if not already performed
2. Echocardiogram for scar/EF/PA pressure

Cardiomyopathy

Pre-referral consideration:

1. ECG
2. Chest X-ray

Red Flags:

Pre-syncope, syncope, SOB at rest, progressive weight gain r/t unresponsiveness to diuretics

Lab Studies: Recommended

1. Serum Chemistries (Chem. 7)
2. CBC
3. TSH
4. CHD profile
5. BNP

Testing Studies: Recommended

1. Echocardiogram (baseline)
2. Myoview
3. 48 hr Holter Monitor

Chest Pain

Pre-Referral Considerations:

1. Use to differentiate pre-test probability
 - a. Sex
 - b. Age
 - c. Symptoms
2. Typical angina is central chest pressure, squeezing and/or fullness especially with exertion and relief with rest or nitroglycerine
3. Atypical angina is arm, throat, jaw discomfort, or exertional fatigue or shortness of breath
4. Non-anginal pain is none or one of the typical (central chest, exertion relief with rest) symptoms and includes things like chest wall tenderness
5. Office ECG

Red Flags: ST elevations or unstable angina call 911

Lab: Recommended

1. CBC
2. BMP
3. Fasting Lipid Profile
4. TSH
5. UA

Stress Testing:

1. If normal resting ECG and able to exercise greater than 4 METs order plain exercise treadmill test
2. If resting ECG shows ST segment depression <1 mm, complete left bundle branch block, ventricular pace rhythm, ventricular pre-excitation syndrome, or patient had previous PCI or CABG some sort of imaging is needed either echocardiography or nuclear studies
3. If person unable to exercise then pharmacological stress test such as dobutamine or persantine is needed

Contraindications to Stress Testing Include:

1. Recent acute MI
2. Severe aortic stenosis
3. Decompensated heart failure
4. Symptomatic cardiac arrhythmias
5. Unstable angina
6. Acute aortic dissection
7. Acute pericarditis or myocarditis or acute pulmonary embolus

Palpitations

Pre-referral considerations:

1. Consider:
 - a. Heart failure
 - b. Thyroid disease
 - c. Anxiety
 - d. Heart valve disease
2. ECG
3. Anxiety disorder-7 screening

Red flags:

1. Hemodynamically unstable patients should call 911 and seek emergency care

Lab Studies: Recommended

1. CBC
2. BMP
3. TSH

Testing Studies: Recommended

1. Stress echocardiogram if over age 40
2. Echocardiogram
3. Holter or event monitor

Valvular Heart Disease

Pre-referral considerations:

1. No routine imaging needed for:
 - a. Patients with no change in symptoms or exam
 - b. A quiet systolic murmur that can be heard only after careful auscultation over a localized area
2. If individual has significant valvular regurgitation cardiology should be actively following and routine imaging is required

Red flags: Individuals with stenosis may be followed in primary care with referral prompted by any worsening of exam or new symptoms such as a change in murmur, shortness of breath, fatigue, chest pain or exertional symptom

Lab Studies: Recommended

1. TSH
2. CBC
3. CMP

Testing Studies: Recommended

1. ECG
2. Baseline echocardiogram
3. Echocardiogram every 2-5 years for patients with mild to moderate aortic or mitral stenosis and every year following evaluation for patients with moderate to severe aortic or mitral stenosis

What to avoid ordering: to avoid unnecessary testing

1. Routine echocardiograms if no change in exam or symptoms
2. Avoid ordering routine echocardiograms for a quiet murmur that can be heard only after careful auscultation over a localized area