

## 1. Hypertension

**Presentation:** Most are not symptomatic, Occipital Headaches, headache on awakening in am, blurry vision,

**Assessment:**

- Asymptomatic
- Occipital headache
- Blurry vision
- Headache upon wakening
- Look for AV nicking
- LVH

**Exam:**

- Carotid bruits
- Abdominal bruits
- Kidney bruits

**Diagnostic studies:** to look for secondary causes of HTN like target organ damage and establish ASCVD risk: EKG, fasting lipid profile, fasting blood glucose, CBC, CMP (electrolyte, creatinine, & calcium levels), and urinalysis (checking for proteinuria).

**Diagnosis:** Measure BP 5 minutes apart. Average of 2 or more BP readings on two different visits at > 140/90 mm Hg start then can be diagnosed with HTN.

**If Stage 1 (ASCVD <10%) then non-pharmacologic management only:**

- First: Lifestyle modifications: diet and exercise 30 minutes aerobic exercise 5 days per week.
- Limit alcohol
- stop smoking
- stress management.
- DASH
- Medication compliance
- Reduce sodium intake
- Measure BP daily

**If Stage 2 (ASCVD >10% and known CAD) initiate lifestyle + Pharmacologic Management:**

- Alone: hydrochlorothiazide (HCTZ) 25 mg/day (chlorthalidone is preferred over HCTZ)
- Alone: lisinopril 10mg/day complicated HTN first line
- Combo: thiazide + ACE or ARB
- Alternative CB (especially in isolated HTN seen mainly in older adults)
- Black population: thiazide + CCB is recommended first line

**Follow up:**

- 2-4weeks

**Referral:**

- Cardiology if EKG is abnormal

**Differential:**

- Secondary hypertension
- Pregnant
- Pregnancy induced hypertension

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## 2. Hyperlipidemia

**Etiology:** may be familial, dietary, obesity, hypothyroid, renal disorders, thiazide or beta blocker use, alcohol and/or caffeine intake

**Presentation:** few physical findings

- Xanthomata (lipid deposits around the eyes)
- Corneal Arcus prior to age 50 years (white iris), normal
- Angina
- Bruits
- MI
- Stroke

**Diagnostics:**

- Fasting/nonfasting lipid profile (total cholesterol, LDL, and HDL minimally affected by eating)
- Glucose,
- UA and creatinine (for detection of nephrotic syndrome which can induce dyslipidemia),
- TSH (for detection of hypothyroidism)

**Diagnosis:** Pt with LDL  $\geq$  190mg/dL

**Non-pharmacologic Management:**

- Lifestyle Modification; diet and exercise.

**Pharmacologic Management**

Those who benefit most from statin therapy include:

- hx of CVD or stroke,
- LDL 190 or greater,
- DM with LDL 70-189,
- no evidence of ASCVD or DM but have LDL 70-189 PLUS an estimated ASCVD risk of 7% or greater
- **High risk:**
  - Atorvastatin 40 or 80 mg daily
  - Rosuvastatin 20 or 40 mg daily
- **Moderate risk:**
  - Atorvastatin 10 or 20 mg daily
  - (other statin medications also listed in Hollier)
- If statins not tolerated, temporarily stop, decrease dose, and re-challenge with 2-3 statins of differing metabolic pathways and intensities.

**Follow up:**

- after initiating therapy, follow-up every 6-8 weeks until goal attained then every 6-12 months to evaluate compliance
- evaluate lipids every 5 years starting at age 20 if normal values obtained

**Refer:** Nutritionist

**Differentials:** consider secondary causes

- Hypothyroidism
- Pregnancy
- Diabetes
- Non-fasting state

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