Visit type: New onset Hypertension

Pertinent questions expected to be included in the history:
- Age
- Past blood pressures
- Last normal blood pressure
- Course of blood pressure
- Any prior treatment for blood pressure; if Yes - what, when, dose, side effects
- Any symptoms of target organ damage: Headache, blurry vision, chest pain, nausea, vomiting, shortness of breath, claudication.
- Ask & look for symptoms of secondary causes:
  - Headache, sweating, tachycardia, tremors: Consider Pheochromocytoma
  - Central obesity, abdominal striae, proximal muscle weakness, and hirsutism: Consider Cushing’s syndrome
  - Snoring, Early morning headache, somnolescence: Consider Obstructive sleep apnea
- Possible precipitating causes:
  - Hypo/ Hyperthyroidism
  - Medications – NSAID’s, OCP’s, Postmenopausal hormonal therapy, Antidepressants (MAOI’s), Steroids,
  - Drug abuse: Alcohol, cocaine, nicotine
  - Sedentary lifestyle (Assess family status, work status, education level)
- Inquire about family history of Hypertension, premature CVD, DM, Pheochromocytoma & other endocrine disorders, renal disease, gout

Pertinent aspects of the physical expected to be done:
- Vitals: Height and weight, Blood pressure (check it yourself)
- EYES: Fundoscopic examination
- Neck: Auscultation of carotids & Thyroid palpation
- CVS & Respiratory exam
- Abdomen: R/o renal & Aortic masses/bruit, check femoral pulses
- Neuro & MS: Check muscle strength, check DTR’s
- Foot exam: palpation of DP and PT pulses

Labs:
- BMP along with EGFR
- Fasting glucose and Fasting lipid profile
- Urinalysis: glucose, ketones, protein, sediment
- Liver function test (to start medication for diabetes and antihyperlipidemia)
- ECG
- Annual optometry screening

Patient Education:
- All patients should undergo appropriate lifestyle (nonpharmacologic) modification: Encourage and refer to appropriate resources (nutritionist, psychologist, social worker, clinical pharmacist)
- Maintain normal body weight (BMI less than 25)
- Consume a diet rich in fruits, vegetables, low-fat meat & dairy products and lower the amount of salt added by food processors
- Regular aerobic physical activity (at least 30 minutes per day, most days of the week)
- Limit consumption of alcohol to no more than 2 drinks per day in most men and no more than 1 drink per day in women
- Self monitoring

Goals:
- Blood pressure of 140/90 mmHg in patients with uncomplicated combined systolic and diastolic hypertension
- Less than 130/80 mmHg in patients with diabetes mellitus and patients with chronic kidney disease

Treatment:

**Lifestyle Modifications**

**Uncontrolled Blood Pressure**

**First Choice Medication**

**No Compelling Indications**
- Stage 1 HTN
  140-159/90-99 mmHg
  Thiazide-type Diuretics
  May Consider: ACEI, ARB, BB, CCB or combination

**Stage 2 HTN**
- >160/≥100 mmHg
- 2 medication combo pills
  Thiazide type diuretics plus: ACEI, ARB, BB, CCB or

**Compelling Indications**
- Heart Failure
  DU, BB, ACEI, ARB, CCB, AA
- Post MI
  BB, ACEI, AA
- High CAD
  DU, BB, ACEI, CCB
- Diabetes mellitus
  DU, BB, ACEI, ARB, CCB, AA
- Chronic kidney disease
  ACEI, ARB
- Recurrent stroke prevention
  DU, ACEI

**Optimize medications dosages**
- Add additional agents as required
- Consider consult

DU-diuretics, ACEI-angiotensin converting enzyme inhibitor; ARB-angiotensin receptor blocker; AA-aldosterone antagonist; BB-beta-blocker; CCB-calcium channel blocker.
References

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