

President's Message

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WHEN TO INITIATE DRUG THERAPY ON FIRST OFFICE VISIT?

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The decision to initiate drug therapy in a hypertensive patient should not be taken lightly. Pharmacologic therapy of hypertension is a lifelong therapy. Once initiated, drug treatment will continue indefinitely since there is no cure from established essential hypertension except in rare conditions such as few secondary forms, or after extensive myocardial or brain infarction or after development of Addison's disease. Blood pressure is quite variable between visits and even during the same office visit, where in some individuals readings can vary by 20 or 30 mmHg. Therefore, in order to avoid over-diagnosis of hypertension and prescribe unnecessary medications, it is mandatory not to initiate drug therapy on first office visit except in the following conditions:

1. Hypertensive emergency.
2. Severe hypertension after excluding a panic attack.
3. High blood pressure with target organ damage (TOD).

1- Hypertensive Emergencies

In hypertensive emergencies, high blood pressure is complicated by life threatening and or impending rapid progressive vital organ damage. Examples include severe hypertension associated with acute pulmonary edema, congestive heart failure, acute coronary syndromes (myocardial

infarction, unstable angina), acute aortic dissection, hypertensive encephalopathy, eclampsia, intracerebral hemorrhage, cerebral infarction, subarachnoid hemorrhage and acute renal failure. Hypertensive emergencies necessitate immediate hospitalization, continuous blood pressure monitoring parenteral antihypertensive medications.

- 2- Very High Levels of blood pressure (> 210/120 mmHg) that persist after repeated blood pressure measurements over 30 minutes or more and after exclusion of a panic attack will require patient observations, administration of rapid orally active antihypertensive drug such as calcium antagonists and checking blood pressure over the next 24 hours. Many patients with panic attacks present to the emergency department with severe elevations of blood pressure sometimes exceeding 210/120 mmHg that subside spontaneously after relief of patients severe anxiety. Panic attacks are characterized by short periods of intense fear or discomfort that develops abruptly and reaches a peak within 10 minutes. Panic attacks are accompanied by somatic and cognitive symptoms which include; shortness of breath, dizziness, hyperventilation, palpitations, trembling, sweating, feeling of choking, nausea, abdominal distension, numbness, chills, chest pain, fear of dying, fear of going crazy or doing something uncontrolled. Normotensive patients with panic disorder have episodically hypertensive blood pressure readings with an increased heart rate. These hemodynamic alternations appear to be secondary to their panic attacks. Despite these episodic hypertensive periods, the mean ambulatory blood pressure remains within the normotensive range.

Treatment includes patient reassurance, administration of a rapidly acting minor tranquilizer and follow-up. These hypertensive episodes usually subside in 30 minutes, while blood pressure returns to normal without antihypertensive drugs. Patients usually have a history of chronic anxiety and depression. Panic attacks are liable to reoccurrence. Identification of triggering situation and long term administration of an SSRI (specific serotonin receptor inhibitor) e.g. citalopram or referral to psychiatrist may be necessary.

- 3- Patients seen for the first time with high blood pressure ($\geq 180/110$ mmHg) are candidates for antihypertensive therapy on first office visit if they have TOD and high blood pressure persists on repeated measurements in the office over 30 minutes. TOD includes clinical or electrocardiographic evidence of left ventricular hypertrophy or myocardial ischemia, optic fundus changes (hypertensive retinopathy), carotid bruits, peripheral arterial disease and proteinuria. Detailed laboratory evaluation is recommended in this group including renal function tests, abdominal ultrasound, carotid and peripheral arterial duplex ultrasound. Patients are seen within two weeks after initiation of antihypertensive therapy. Combination therapy is recommended in this high risk group on first office visit.

In absence of TOD, white-coat or isolated office hypertension should be excluded as a cause for patient's high blood pressure. Blood pressure readings in these patients rarely exceed 180/110 mmHg during office visits. Blood pressure measurement outside office or at home is within the normal range ($<140/90$ mmHg). Ambulatory 24-hours blood pressure monitoring is the sure way to exclude white-coat hypertension. In some

patients, blood pressure drops after repeated office measurements, however, in a good proportion high office blood pressure readings persists.

The management of these patients includes lifestyle modification; dietary measures, limiting salt intake, correction of obesity and solving family, social and work conflicts. Reassurance, treatment of anxiety and follow-up is recommended. Some patients with white-coat hypertension develop persistent elevation of blood pressure; therefore, blood pressure monitoring and repeated home measurements are needed. All precautions should be taken to obtain accurate blood pressure readings. Attention to details and following guidelines is essential. The EHS outlined, in its recent 2014 guidelines, the details and different steps that should be followed before and during blood pressure measurement procedure. Diagnosis and follow-up of hypertensive depends on obtaining accurate numbers.