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Transient Hypertension

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Abstract

Transient high BP recording are quite common. It is important to recognize, whether the recorded high BP is of episodic or primary hypertension. Varieties of stress factors can influence high BP recordings. These reversible factors include smoking, sleeplessness, alcohol, stressful work atmosphere, medications and drug abuse. It is essential to identify above reversible factors, before we label a person said to have Primary hypertension. Correction or elimination of risk factors can normalize BP. Labeling person as Hypertension not only adds increased incidence of disease also subjects for unwarranted treatment and drug toxicities. Periodic follow up and elimination of reversible factors causing high BP, decides further prognosis of transient hypertension.

Keywords: Hypertension; High blood pressure; Antihypertensive

Introduction

Episodes of High Blood pressure recordings are quite common in every day clinical practice. There are several factors, which determine the variability of BP. Persistent intermittent high blood pressure, noticed in certain individuals, may add to pool of primary hypertension subjects. Do we require initiating treatment in this group? The present various guidelines are not clear in this regard. Selected group of individuals might benefit treatment with antihypertensive.

Definition

Blood pressure measurements, more than 140/90 mm of Hg, which persists above normal, inspite of several measurements at given point of time. These patients often show normal BP or prehypertension, on other days.

Synonyms include white coat hypertension, Labile hypertension, Transient hypertension, office high blood pressure, Borderline hypertension.

Labile hypertension is not always a benign condition. Some of studies have noted, increased incidence of cardiovascular events [1].

Determinants of Blood Pressure Variability

Stress – Physical example- exercise

Behaviours- Anxiety, Stress

Situational example- Work pressure, Attending interview, Exams, Surgery - Peri operative

Drugs - NSAIDS

Steroids

Sympathomimetics

Erythropoietin

Cyclosporin

Toxins - Alcohol

Cocaine abuse

Sleep Disorders - Insomnia, OSA

Smoking

Somatic pain

Blood pressure variations also depend on individual accuracy and competence in recording BP, instrumental errors and type of BP recording device [2].

Evaluation

It is always suggested to reconfirm presence of high BP, by re-recording, after 10-15 mins of rest or on other day. For Proper recording BP use of appropriate sized cuff for each individual and comfortable seated position is recommend for same. A thorough general physical examination, including peripheral arterial system, is required for detection of primary/secondary causes of hypertension.

Single measurement of BP can often overestimate diagnosis of Hypertension up to in 20-30% of individuals and also likely to miss out true hypertension in 1/3 of individuals [2]. So the formore individuals are often mis classified as true Hypertension and often treated for same with antihypertensives.

Ambulatory blood pressure monitoring is helpful in deciding blood pressure is sustained hypertension or transient HT [2-4].

Fundus exam is an important step, in determining the effect of Hypertension and planning therapeutic measures [5]. Identify reversible risk factors in causation of Labile HT. Evaluation for endocrinal diseases of thyroid, adrenal and pituitary glands and treatment of same, can bring down BP. Also it is essential to look for secondary causes of hypertension, whenever it is suspected at extremes of age (< 30 and > 60 yrs). Renal function tests estimation is important step in determining the effect or cause of hypertension. ECG and ECHO are helpful to note the duration of hypertension.

Lifestyle modifications in form of brisk walking, weight reduction, low salt intake (< 5 G/day) and relaxation technique have been found to be useful in reduction of high BP [6].

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Short courses, ranging from 6-12 weeks of short acting beta-blockers and benzodiazepines are helpful to relieve anxiety and stress.

Periodic blood pressure monitoring is recommended annually or biannual [4] (Figure 1).

Unanswered Issues Include

1. Number of patients likely to progress for Sustained Hypertension [4]
2. Treatment of Transient HT with antihypertensive in preventing cardiovascular events
3. Self blood pressure monitoring in determining initiation of treatment for Labile HT [2,7]
4. Whether, labile blood pressure, is the the earliest manifestation of primary Hypertension [8]?

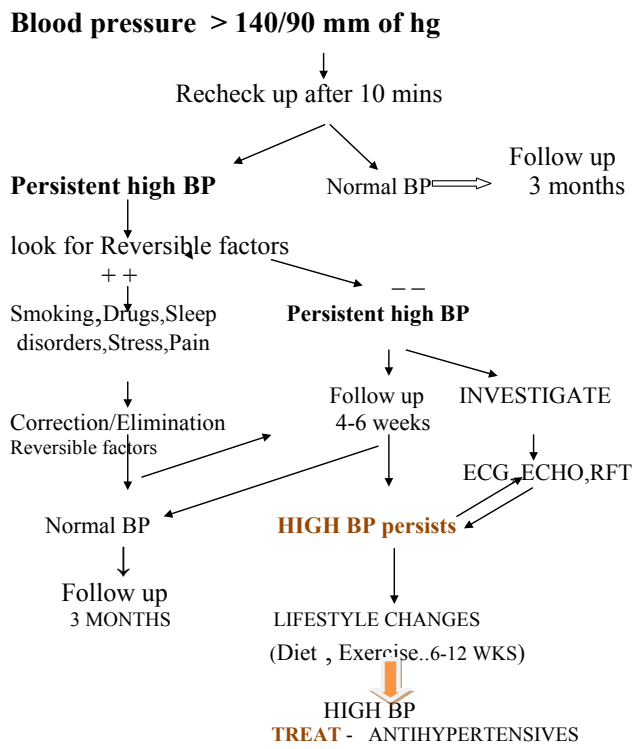

Figure 1: Approach to transient high BP.

Conclusions

Transient hypertension is a clinical state of episodic high BP recording. The transient high BP state is influenced by several reversible factors. The Identification and elimination of reversible factors and periodic follow up these patients, determines, further nature of clinical state.

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