Myths in the Management of Hypertension in Iraq Diyala Society

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Introduction

Hypertension (HT) is a common medical disorder. About 20 – 30% of adults in the more developed countries have HT. Blood pressure tends to increase with age in most societies and HT is slightly more common in men than in women [1]

Definite HT has been taken to be a blood pressure, on two or more clinic reading on two or more occasions of ≥ 140/ 90 mm Hg. [2] . Most guidelines for the treatment of HT,

Confirm that appropriate, monitored long term treatment of HT lowers the incidence of hypertensive complications whether chronic end organ damage or acute hypertensive emergencies [3 , 4].

In more than 95%. Of cases, a specific underlying cause of HT can not be found. Such patients are said to have essential HT, the pathogenesis of which is not clearly understood. Unfortunately the recognition and correct treatment of HT in the general population are still not adequate [5,6] .

I hope this study will participate in estimating the magnitude of the problem when dealing with patients with chronic HT, highlight on the pitfalls that threaten the disease control as far as doctors and patients satisfactions and believes are concerned regarding the nature of the disease, treatment guidelines, associated risk factors, and co morbidities.

Patients and Methods

From January 2007 to January 2008, 210 patients (94 males 44.7%, 116 females 55.2%) with moderate to severe HT were seen at Alsaadia General Hospital, on an outpatient clinic basis. Their ages ranged from 25 to 77 years (mean age 48.5 year)

These patients were examined every two months, using a well – calibrated sphygmo - manometer with a cuff of proper size after the patient has been resting comfortably back supported in the sitting or supine position, for at least 5 minutes. After removing tight clothing form the arm, measurements were made to the nearest 2 mm Hg using phase V (disappearance of sounds) for measuring diastolic blood pressure , and taking two readings for each visit , with additional standing blood pressure in elderly, diabetics and those with possible postural hypotension [7]

All patients were questioned and interviewed about : symptoms , drug dose and timing compliance and side effects. Their believes and satisfactions about the nature and treatment of their disease , life style diet and habits (smoking and alcohol consumption , exercise) [8] , concomitant diseases as diabetes or others and if other drugs were used which may breakdown blood pressure control like steroids , estrogens or nonsteroidal **anti–inflammatory drugs.**

Patients at first visit were examined for features or physical signs that may point to one of the causes of secondary HT. and at each visit were examined for abnormal signs due to the complications of HT especially ocular fundi , evidence of left ventricular hypertrophy and cardiac decompensation or of a previous cerebrovascular accident.

Results

In 150 patients (71.4%) the age of onset was between 25 and 55, the same finding mentioned by Berkin KE et al. [9] in about two third of cases (62.2%) blood pressure was severe systolic ≥ 180 mm Hg or diastolic ≥ 110 mm Hg , and in the minority of cases (35.7%) blood pressure was moderate , systolic <180 mm Hg or diastolic <110 mm Hg , [2] and no mild cases were recorded (table 1).

Table (1): (severity of disease)

category	Number & Percent of patients	Systolic Pressure mm Hg	Diastolic Pressure mm Hg
Moderate (stage 2)	75 (35.7%)	160-179	100-109
Severe (stage 3)	135 (62.2%)	≥ 180	≥ 110

One fourth (25.2%) of patients were smokers .10 mortalities (4.76%) occurred (cerebrovascular accident in 4 patients ,acute myocardial infarction in 3 patients and congestive heart failure in 3 patients) (table 2) . Also DAHLOF B et al considered stroke and coronary heart disease two major causes of mortality rates [4]. Morbidities were seen in 65 patients (30.9%), the two major causes were cerebrovascular accident and coronary artery disease (table- 3).

Table (2): causes of mortality (10 = 4.76%)

Disease name	Disease Number
Coronary artery disease	3
Congestive heart failure	3
Cerebrovascular accident	4

Table (3): causes of morbidity (65=30.9%)

Disease	CVA	IHD	LVH	LVD	Art	RF
Number	24	23	15	10	6	5

CVA=cerebrovascular accident , IHD=ischemic heart disease ,LVH= left ventricular hypertrophy , LVD= left ventricular dysfunction, Art= arrhythmia, RF=renal failure .

Other minor causes were left ventricular (LV) hypertrophy, LV-systolic dysfunction, cardiac arrhythmias (atrial fibrillation and premature ventricular complexes and renal insufficiency (elevated blood urea and serum creatinine levels. The concomitant diseases were seen in 56 patients (26.6%). Of which Diabetes was the commonest one (table -4),

Table (4): Concomitant disease (56=26.6%)

Disease	Number & percent
Diabetes Mellitus	25 (11.9%)
Hyperlipidemia	15 (7.1%)
Musculoskeletal disorder	12 (5.7%)
Obstructive airway disease	8 (3.8%)
Asthma	7 (3.3%)
Peptic disease	5 (2.3%)
Hyperuricemia	2 (0.9 %)
Ulcerative colitis	1 (0.4%)

others like hyperlipidemia, musucloskeletal disorder, chronic obstructive airway disease, bronchial asthma, peptic disease, hyperuricemia and ulcerative colitis.

Within one year follow up, only 9.04% of patients were found achieving good control of their blood pressure :systolic < 140 mm Hg and diastolic < 90 mm Hg

Discussion

Most patient with hypertension (HT) have no specific symptoms referable to their blood pressure elevation and are identified only in the course of a physical examination [5] .Also mild to moderate hypertension (HT) is symptomatic for many years [2] so the typical patient has no reason to be a ware of having hypertension . Headache is characteristic only of severe hypertension [10]. So it is not easy to let the hypertensive patient satisfy in lifelong treatment especially the uneducated one .

In this study :

- 9 young patients (below 40) (4.2%) refused treatment, because daily drugs let them look older .

- 93 patients (18.5%) satisfy only in nondrug theraputic intervention as effective measure to normalize their blood pressure .

- 9 patients (4.2%) believe that drugs have deleterious consequences as hypotension , heart failure and gastrointestinal disturbances.

- 29 patients (13.7%) refused treatment because they are asymptomatic and this mean their blood pressure is not elevated , though they are typical cases of chronic hypertension .

- In 91 patients (43.3%) the rule was irregular treatment (Non compliant) due to many factors : (1) Neglection (2) Poor and infrequent follow up (3) wrong readings (underestimation) by unqualified personel . (4) Do not trust in chronic hypertension , and think of short lived elevations due to acute stressful conditions or dietary reasons . and oral antihypertensive drugs can normalize this within hours (this is absolutely wrong most drugs need (1-4)weeks to establish good blood pressure control (5) financial causes (cost) among poor classes) .

- 22 patients (10.4%) use other drugs for concomitant diseases as steroids , estrogens and nonsteroidal anti-inflammatory drugs leading to breakdown the control of blood pressure . These myths in understanding the nature of the disease , the correct treatment guidelines , and consequences of under or non-treated hypertension resulted in uncontrolled blood pressure in more than 90% of our collected patients .

In united states (US) , of the fifty million hypertensive Americans : 70% are aware of their diagnosis , but only 50% are receiving treatment and only 25% are under control [11] .

In the united kingdom (UK) , the rule of halves has been observed : only half of all hypertensives are diagnosed , only half of these are on treatment , and blood pressure is well controlled in only half of those receiving therapy [12] .

Conclusions

Most hypertensive patients are not achieving controlled blood pressure , this opens the door for further education programs and in-depth studies on patient's behavior and the impact of myths about the disease among patients and general population . And to improve patient-doctor communication skills , to lower blood pressure even in symptom free people as near to normal as possible . with out impairing quality of life stressing on the general nondrug measures , and using low doses , even two or three drugs may produce fewer unwanted effects than maximum dose of a single drug .

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