**E.H.S. EXECUTIVE BOARD:**

President : M. M. Ibrahim, MD  
Vice President : H. E. Attia, MD  
Secretary : H. Rizk, MD  
Treasurer : W. El Aroussy, MD  
Members :  
  - A. M. Hassaballa, MD  
  - M. S. Mokhtar, MD  
  - S. El-Tobgy, MD  
  - O. Khashaab, MD  
  - M. M. Gomaa, MD

**EDITORIAL COMMITTEE:**

Editor : M Hamed, MD  
Assistant Editors :  
  - A.M. El-keiy, MD  
  - A. El-Etriby, MD  
  - M. El Ramly, MD  
  - H. Gobran, MD  
  - W. El Naggar, MD  
  - Z. Ashour, MD

**PRESIDENT'S MESSAGE:**

**PRIORITIES IN HYPERTENSION RESEARCH IN DEVELOPING COUNTRIES**

*Epidemiologic Research*

The first priority in epidemiologic research is to define the magnitude of the hypertension problem in an individual country. The majority of third world countries have no national estimates of the prevalence of hypertension.

A second question is to identify the susceptible groups in the nation, that is those most likely to develop the disease, to know its prevalence among different age groups, geographic areas, socioeconomic classes and the influence of factors like gender, skin colour, etc.

Thirdly, hypertension risk factors such as: obesity and type of body fat distribution, excessive salt intake, deficiency in minerals K, Mg and Ca, excessive alcohol intake, psychosocial stress, low levels of education, poor SES, skin colour and sedentary lifestyle should be recognized and prevalence in the nation and how closely they are related to blood pressure level should be examined.

In some countries there are unusual hypertension risk factors such as schistosomiasis in Egypt which has been linked to hypertension through its effect on the urinary tract. Environmental pollution in the form of excessive noise, or lead pollution may contribute to the rise of blood pressure in some communities.

We need to develop methods to modify these risk factors at the national level. Other epidemiologic research questions include the type and prevalence of hypertensive cardiovascular complications.

These might be influenced by environment, race and other demographic characteristics. It is important to identify the susceptible groups which are most vulnerable to complications. How close are these complications related to the level of blood pressure and what are the other mechanisms involved? We need to develop methods for their early detection.

Primary prevention of hypertension is possible through weight reduction, regular exercise, alcohol moderation, salt restriction and other dietary measures. It is important to identify groups where particular intervention is more effective, e.g., salt restriction in the elderly, weight reduction in the young and middle aged, K supplementation in blacks. We need to know what is the optimal lifestyle intervention and to define the best approaches and its impact on incidence of hypertension and its control.

Finally, we have to develop methods to improve detection and control of hypertension. This is specially important in
developing countries with high illiteracy rate. Data from the Egyptian NHP Survey showed that among hypertensives, only 37.5% were aware of having high blood pressure, 23.9% were receiving treatment and only 8% had their blood pressure controlled.

**Clinical Research**

There are a number of unsolved issues. First, regarding blood pressure measurements, how many readings do we need what is the length of period of observation required before classifying an individual as being hypertensive? The role of ambulatory blood pressure is not setted.

Another question is the optimal blood pressure reduction, what is the desired level of blood pressure? It is not necessarily the same level in all individuals. Race, age and gender may influence our target blood pressure. We might need more aggressive reduction in blood pressure in special groups, e.g., diabetics blacks and patients with end-organ damage.

The question of first step drugs is not clear and needs further research. In Egypt, we are planning a multicenter study in order to examine the risk benefit ratio of different antihypertensives and the place of new antihypertensive agents.

The study addresses a very important question in developing countries with limited financial resources. Do we need these expensive drugs or not?

**International Cooperation:**

It is important to stress the value of cooperation between developing and developed countries in future hypertension research. Joint research projects should be encouraged especially in the area of epidemiological research.

Developed countries can share with funding and expertise while developing countries can contribute by data and scientific information that will improve the understanding of hypertension. The Egyptian National Hypertension Project is a good example of this international joint cooperation between the Egyptian and the US governments.

---

**M. Mohsen Ibrahim, M.D.**

Professor of Cardiology - Cairo University
President of the Egyptian Hypertension Society

---

**Editorial**

**PHEOCHROMOCYTOMA**

*By HELMY M. SIRAGY, MD*

Professor of Medicine, University of Virginia, Health Sciences Center Charlottesville, VA 22908 USA

Phaeochromocytoma is treated successfully in 90% of cases, whereas if left untreated, it will most invariably be fatal. Eighty-five to 90% of these tumors occur in the adrenal glands. Extraadrenal Phaeochromocytoma has been recognized in 10-15% of cases. They occur equally in both sexes and at any age. In about 10% of cases, the tumor is present in both adrenal glands. In familial Phaeochromocytoma, the tumor is present in both glands in about 50%.

Phaeochromocytoma may be associated with other endocrine disease, such as multiple endocrine neoplasia. Type II-A or II-B. in children, 50% of Phaeochromocytomas are solitary and intra-adrenal, 25% involve the adrenal bilaterally, and 25% are extra-adrenal. The clinical manifestations and the severity of symptoms of Phaeochromocytoma depend mainly on the amount of catecholamine liberated into the circulation and whether this liberation is sustained or episodic.
The hallmark of Phaeochromocytoma is hypertension, either paroxysmal or sustained. A typical paroxysm is characterized by a sudden major increase in blood pressure, severe throbbing headache, profuse sweating over most of the body; palpitations with or without tachycardia, anxiety, a sense of doom, skin pallor, nausea with or without emesis, and abdominal pain. The extensive differential diagnosis of Phaeochromocytoma includes anxiety and panic attacks, abrupt withdrawal of clonidine therapy, amphetamine use, and hypoglycemia.

The diagnosis of Phaeochromocytoma must rest on biochemical determinations (i.e., the demonstration of elevated levels of catecholamines or their metabolites in blood or in urine). A 24-h urine collected in a strong acid for measurements of epinephrine, norepinephrine metanephrine, normetanephrine, and VMA. Total urinary creatinine should be measured to insure a adequacy of the collection.

The patient should be off all medications, if possible. If a hypertensive therapy must be continued, diuretics, calcium channel blockers, and angiotensin converting enzyme inhibitors cause minimal interference. It is recommended that determination of urinary catecholamines should be done on at least two different occasions to rule out an laboratory errors. If plasma catecholamines are measure it should be done under controlled circumstances.

It is important to recognize that all provocative tests for Phaeochromocytoma are inherently dangerous and are not recommended. Attempts to localize the site of the tumor should not be made until biochemical studies have confirmed its presence. The demonstration of a mass in an adrenal gland does not prove it is a Phaeochromocytoma. The metaiodopenzylguanidine (MIPG) labeled with iodine-131 (I) is accurate in 80-95% of Phaeochromocytomas.

Magnetic resonance imaging and computerized CT scan have been useful diagnostic tools in localizing Phaeochromocytoma. Surgical removal of phaeochromocytoma is clearly the treatment of choice. Preparation should start at least seven days before surgery with the administration of a nonspecific alpha-adrenergic receptor blocker, phenoxybenzamine. A specific alpha I-antagonist (e.g., Minipress) or Labetotol, a drug with both alpha-and beta-antagonist activity, may also be used in controlling blood pressure. Metyrosine, a drug that inhibits catecholamine synthesis, can be used to treat patients with phaeochromocytoma. During surgery, phentolamine or nitroprusside, or both, can be used to control hypertensive episodes.

Ongoing Research

Previously published results from the Egyptian National Hypertension Project indicate that a large portion (national estimate 26%) of the adult population of this country suffers from high blood pressure.

The magnitude of the problem called for identification of hypertension risk factors in Egyptians, so that in the future this risk factor profile may be altered to a more favorable one. The risk factors examined included non-modifiable ones, such as age, gender, family history of hypertension and skin color.

Modifiable factors examined included obesity, body fat distribution, alcohol consumption, sodium intake, insulin blood level, urinary Bilharziasis, use of NSAIDS, and urinary potassium excretion. Here is a summary of some non modifiable factors, namely age, gender and family history.
Age and Gender:

Hypertension was found to increase with age, as is illustrated in Figure 1. Gender distribution showed a higher prevalence in males in the age groups younger than 45 years. However, in the age groups older than 44 years, hypertension was more prevalent in females.

Positive Family History

A family history of hypertension depends not only on the presence of the disease, but also on the awareness of the individual and his/her family of it. Lack of awareness may influence the results. Despite this limitation, hypertension was more prevalent in subjects who had a positive family history, as can be seen from Figure 2.

This difference was absent in the group aged 25-34 years, progressively increased between both groups with advancing age, and was nullified again in the group whose age was 75 years or above.

Local Literature

COMPARISON OF BENAZEPRIL AND CAPTOPRIL IN HYPERTENSIVE EGYPTIANS
M.M. Ibrahim, M.M. Abdel Ghany & S.S. Zaghloul
Cardiology Department and Echocardiography Unit
Cairo University

The efficacy and tolerability of Benazepril (B), a new long acting, non-sulphydryl containing angiotensin converting
enzyme inhibitor, were compared with those of Captopril (C) in patients suffering from mild to moderate hypertension.

Thirty eight male patients (mean age 48.1 ± 7.4 years were randomized in a double-blind, dose titrated, fashion following a 24 week placebo period. Left ventricular functions (echocardiography) were evaluated following placebo and after 8 weeks active treatment.

The initial doses were 10 mg once daily for B and 25 mg b.i.d. for C, for two weeks. The scheme of therapy depended on whether or not the supine diastolic blood pressure (DBP) was normalized, i.e. DBP =1< 90 mmHg; which if not the case, the dose was doubled and a diuretic was added after 2 and 4 weeks respectively. By the end of the trial, mean blood pressure decreased from 168/106 to 131/86 mmHg in the B group and from 173/107 to 144/88 mmHg in the C group.

After two weeks of active therapy, there were significant reductions in the mean supine blood pressure (BP) readings in both groups, compared with their baseline values. By the end of the fourth week (phase of monotherapy regimen), 50% of patients in the Benazepril treatment group. compared with 26.3% of the Captopril patients achieved DBP =1<90 mm Hg. Throughout the trial period, the percentage of patients with BP< 140/90 mmHg were significantly higher in the B group than the C group.

The echocardiographic measurements showed no changes in both treatment groups. One patient from each group discontinued the drug because of unwanted effects. It can be concluded from this study that both medications are effective in the management of mild to moderate hypertension.

However, the anti-hypertensive efficacy of Benazepril 10-20 mg given once daily seems to be superior to that of Captopril 50-100 mg given in two divided daily doses. Both regimens are well tolerated.

(EHJ 48 (2): in print, 1996)

REGRESSION OF LEFT VENTRICULAR HYPERTROPHY AND DIASTOLIC DYSFUNCTION IN HYPERTENSIVE PATIENTS AFTER BLOOD PRESSURE CONTROL: A ONE YEAR FOLLOW-UP STUDY

Tarek S. Khalil, Said Shalaby, Reda Badr*, Farouk Fuad* and Omneya El Mahgoub
department of Cardiology and General Medicine*, Menoufia and Public Health**, Cairo University

Aim: To study the effect of different groups of anti-hypertensive drugs on left ventricular mass and diastolic function. Methods: We analysed data of 120 patients with diastolic blood pressure>= 95 mmHg referred to outpatient clinic of Shibin-Elkoum University Hospital during the period from 1992-1995.

Patients were subdivided equally into four groups: Group I, hydro-chlorothiazide 50 mg daily, Group II, atenolol 50-100 mg daily, group III, verapamil 80-240 mg daily and Group IV, captopril 25-27 mg daily.

Every patient is followed monthly for a year to study the changes in left ventricular hypertrophy (LVH-thickness of the septal wall in systole and diastole-IVS, thickness of posterior wall in systole and diastole-PW and measurement of left ventricular mass-LVM) by 2-D echocardiography and to study the changes in diastolic function (peak early diastolic inflow velocity-E wave, peak late diastolic inflow velocity-A wave, EIA ratio, Deceleration time-DT, isovolumic relaxation time-IVRT and atrial tilling fraction-AFF) by Doppler study in each visit.

Results: A) LVH: for group I, mean IVS before treatment was 1.47±0.19 cm and after treatment was 1.47±0.19 (P>0.05), PW 1.43±0.18 cm and 1.42±0.17 (P=0.05), LVM 337.0±16 gm and 330.3±83.6 (P>0.05). For group II, mean IVSwas 1.42±0.19 and 1.28±0.11 (P<0.001), PW 1.39±0.18 and 1.27±0.10 (P<0.001), LVM 320.4±91.9 and 258.2±61.2 (P<0.001).
For group III, mean IVS 1.47±0.20 and 1.28±0.11 (P<0.001), PW 1.44±0.20 and 1.26±0.12 (P<0.001), LVM 316.1±91.1 and 228.4±47.6 (P<0.001). For group IV, mean IVS was 1.39±0.16 and 1.21±0.09 (P<0.001), PW 1.35±0.17 and 1.19±0.09 (P<0.001), LVM 303.9±84.5 and 211.1±53.8 (P<0.001).

B) Diastolic function: for group I, mean E wave before treatment was 49.7±11.8 and after treatment was 51.9±12 (P<0.001), A was 70.9±16.4 and 69.3±16.2 (P<0.001), EIA 0.69±0.12 and 0.69±0.12 and 0.69±0.012 (P>0.05), DT 249.8±54 and 2483±4.6 (P<0.001), AFF 0.47±0.07 and 0.45±0.05 (P<0.001), IVRT 125.3±14.6 and 122.7±15.0 (P<0.05).

For group II, mean E wave was 51.7±11.3 and 55.5±11.3 (P<0.001), A wave 75.9±17.6 and 71.5±15.5 (P<0.001), EIA 0.69±0.11 and 0.777±0.07 (P<0.001), DT 250.7±4.7 and 246.7±4.7 (p<0.001), AFF 0.48±0.06 and 0.42±0.03 (P<0.001), IVRT 122.6±12.9 and 113.2±80 (P<0.001).

For group III, E wave was 53.0±8.2 and 58.6±9.9 (P<0.001), A wave 76.6±14.2 and 70.3±12.6 (P<0.001), EIA 0.64±0.08 and 0.84±0.05 (P<0.001), DT 250±8.0 and 243.5±3.0 (p<0.001), AFF 0.50±0.07 and 0.40±0.02 (P<0.001), IVRT 135.3±16.2 and 111.4±64 (P<0.001).

For group IV, mean was was 51.1±10.5 and 55.2±10.3 (P<0.001), A wave 71.2±10.9 and 65.4±11.6 (P<0.001), EIA 0.66±0.11 and 0.8±10.05 (P<0.001) DT 251.5±51 and 2452±2.2 (P<-0.001), AFF 0.46±0.06 and 0.40±0.03 (P<0.001), IVRT 126.3±13.0 and 111 .2±5.2 (P<0.001).

**Conclusion:** Hydrochlorothiazide failed to reduce LVM despite control of blood pressure, but atenolol verapamil and capoten reduced LVM but not normalizing it. Capoten, Verapamil, and atenolol improved left ventricular diastolic dysfunction more than hydrochlorothiazide yet it did not reach the normal values.

In order to normalize LVM and diastolic function in hypertensive patients, a long term antihypertensive therapy for more than 1 year is suggested.

Depolarization and repolarization abnormalities in hypertensive left ventricular hypertrophy prevalence and prognostic implications

M.EI-Badry, M.S. Mokhtar and M.M. Ibrahim Critical Care Cardiology Depts Cairo University

The effect of left ventricular hypertrophy (LVH) due to hypertension on the electrical depolarization and repolarization of the myocardium has been studied in a group of 40 patients (24 males, 16 females, mean age 53 y). Electrical abnormalities as corrected QT (Qtc) interval measured on the surface ECG and late diastolic potentials (LDPs) recorded by the technique of time domain signal averaged electrocardiography (SAECG).

Late diastolic potentials were defined as low amplitude signals (LAS 40) of more than 38 msec, root main square (RMS) of less than 18 UV and 114 msec, excluding bundle branch block. Twelve lead ECG and 24 hours Holter records were correlated with the findings of SAECG in search for ventricular arrhythmias (VA), which were classified according to Lown's criteria into grades I to IV.

Of the 40 hypertensive patients with LVH 16 (40%) had LDP, 23 (57.5%) had abnormally prolonged Qtc and 35 (87.5%) had ventricular arrhythmia compared to 9.7%, 26% and 58% respectively of the 31 hypertensive patients without LVH. Classified according to Low n's grading system, the hypertensive group with LVH tended to have more of the higher grades of VA, i.e. III, IV as compared to hypertensives with no LVH (51.4% V 33.4%) whereas Lown grades I & II were more frequent in the latter as compared to the former (66.6% VS 48.6).

In conclusion, electric depolarization and repolarization abnormalities expressed as low amplitude signals in SAECG, and as prolonged Qtc in the surface EC G are more frequently present in hypertension with LVH than in those without LVH. They could provide the arrhythmogenic substrate that might explain the greater frequency of VA in hypertension with LVH particularly the higher Lown grades.

**Conclusion:** Hydrochlorothiazide failed to reduce LVM despite control of blood pressure, but atenolol verapamil and capoten reduced LVM but not normalizing it. Capoten, Verapamil, and atenolol improved left ventricular diastolic dysfunction more than hydrochlorothiazide yet it did not reach the normal values.

In order to normalize LVM and diastolic function in hypertensive patients, a long term antihypertensive therapy for more than 1 year is suggested.

*(EHJ 48 (4)1996: in print)*
Abstracts of World Literature

COMPARISON OF FIVE ANTIHYPERTENSIVE MONOTHERAPIES AND PLACEBO FOR CHANGE IN PATIENTS RECEIVING NUTRITIONAL-HYGIENIC THERAPY IN THE TREATMENT OF MILD HYPERTENSION STUDY (TOMHS)

Philip R. Liebson, MD; Greg A. Grandits, MS; Sinda Dianzumba, MD; Ronald J. Prineas, MD, BS, PhD; Richard H. Grimm, Jr, MD, PhD; James D. Neaton, PhD; Jeremiah Stamler, MD; for the Treatment of Hypertension Study Research Group

**Background:** Increased left ventricular mass (LVM) by echocardiography is associated with increased risk of cardiovascular disease. Thus, it is of interest to compare the effects of both pharmacological and non-pharmacological approaches to the treatment of hypertension on reduction of LVM.

**Methods and Results** Changes in LV structure were assessed by M-mode echocardiograms in a double-blind, placebo-controlled clinical trial of 844 mild hypertensive participants randomized to nutritional-hygienic (NH) intervention plus placebo or NH plus one of five classes of antihypertensive agents: (1) diuretic (chlorthalidone), (2) B-blocker (acebutolol), (3) a-antagonist (doxazosin mesylate), (4) calcium antagonist (amlodipine maleate), or (5) angiotensin-converting enzyme inhibitor (enalapril maleate) Echocardiograms were performed at baseline, at 3 months, and annually for 4 years.

Changes in blood pressure averaged 16/12 mmHg in the active treatment groups and 9/9 mmHg in the NH only group. All groups showed significant decreases (10% to 15%) in LVM from baseline that appeared at 3 months and continued for 48 months. The chlorthalidone group experienced the greatest decrease at each follow-up visit (average decrease, 34 g), although the differences from other groups were modest (average decrease among 5 other groups, 24 to 27 g).

Participants randomized to NH intervention only had mean changes in LVM similar to those in the participants randomized to NH intervention plus pharmacological treatment. The greatest difference between groups was seen at 12 months, with mean decreases ranging from 35 g (chlorthalidone group) to 17 g (acebutolol group) P=.001 comparing all groups). Within-group analysis showed that changes in weight, urinary sodium excretion, and systolic BP were moderately correlated with changes in LVM, being statistically significant in most analyses.

**Conclusions** NH intervention with emphasis on weight loss and reduction of dietary sodium is as effective as NH intervention plus pharmacological treatment in reducing echocardiographically determined LVM, despite a smaller decrease in blood pressure in the NH intervention only group. A possible exception is that the addition of diuretic (chlorthalidone) may have a modest additional effect on reducing LVM.

(Circulation. 1995;91: 698-706)

DYSPNOEA, ASTHMA, AND BRONCHOSPASM IN RELATION TO TREATMENT WITH ANGIOTENSIN CONVERTING ENZYME INHIBITORS

Helen-Lindey Thomas Hedner, Ola Samuelsson, Jan Lotvall, Lennart Andret, Lars Lindholm, Bengt-Frik Wihoim

**Objective** To evaluate the occurrence of asthma and dyspnoea precipitated or worsened by angiotensin converting enzyme inhibitors.

**Design** Summary of reports of adverse respiratory reaction in relation to treatment with angiotensin converting enzyme inhibitors that were submitted to Swedish Adverse Drug Reactions Advisory Committee and to World Health Organisation's international drug information system until 1992. Sales of angiotensin converting enzyme inhibitors in Sweden were also summarised.
Subjects-Patients receiving angiotension converting enzyme inhibitors who reported adverse respiratory reactions.

Main outcome measures-Clinical characteristics of adverse reactions of asthma, bronchospasm, and dyspnoea.

Results-In Sweden 424 adverse respiratory reactions were reported, of which most (374) were coughing. However, 36 patients had adverse drug reactions diagnosed as asthma, bronchospasm, or dyspnoea. In 33 of these cases the indication for treatment with angiotensin converting enzyme inhibitors was hypertension, in only three heart failure. The respiratory symptoms occurred in about half of the patients within the first two weeks of treatment, and about one third needed hospitalisation or drug treatment. Dyspnoea symptoms occurred in conjunction with other symptoms from the airways or skin in 23 out of the 36 cases. In the WHO database there were 318 reports of asthma or bronchospasm, 516 reports of dyspnoea, and 7260 reports of cough in relation to 11 different angiotensin converting enzyme inhibitors.

Conclusion-Symptoms of airway obstruction in relation to treatment with angiotensin converting enzyme inhibitors seem to be a rare but potentially serious reaction generally occurring within the first few weeks of treatment.

Contribution of left ventricular mass in systemic hypertension: comparison of standard and signal averaged electrocardiography

Dominique Lacroix, Mario Abi Nader, Christine Savoye, Didier Klug, Regis Logier, Salem Kacet, Jean Lekieffre

Objective: To investigate the quantitative relationship, if any, between signal averaged electrocardiographic variables and echocardiographically determined left ventricular mass in hypertensive subjects.

Design: Cohort analytic prospective study.

Setting: University hospital. Subjects-SO hypertensive

Subjects: selected consecutively from inpatients. Patients older than 75 years, with underlying cardiac disease, with inconclusive echocardiograms with bundle branch block, or in atrial fibrillation were excluded.

Interventions-Antihypertensive therapy involving 41 patients was continued.

Main outcome measures-Left ventricular mass calculated in accordance with the standards of the Penn convention. Thirteen criteria derived from combinations of signal averaged electrocardiographic X, Y, and Z Frank orthogonal leads, including voltage criteria, duration, and time-voltage integrals of the ORS complex. Four widely used standard electrocardiographic criteria for detection of left ventricular hypertrophy.

Results-There was no difference in the values for any of the electrocardiographic variables between patients with (n=29) and without left ventricular hypertrophy (n=21). The time-voltage integral of QRS in the horizontal plane was the best signal averaged variable related to left ventricular mass (r=0.33, P=0.019); however, the correlation with Rodstein voltage was stronger (r=0.46, P=0.0009). A positive correlation was also found between left ventricular indexed mass and Rodstein voltage (r=0.43, P=0.001 9).

Stepwise regression analysis revealed Rodstein voltage as the only predictor of indexed mass (P=0.0019), and Rodstein voltage (P=0.0022) and body weight (P=0.01 1) as the only independent correlates of left ventricular mass.

Conclusions-The relation between electrocardiographic variables and left ventricular mass or indexed mass is of limited value; signal averaged orthogonal leads do not improve this assessment compared with standard electrocardiographic leads.
FORTHCOMING RESEARCH

GENERAL FRAMEWORK OF THE EGYPTIAN MULTICENTER HYPERTENSION THERAPY PROJECT [EMHTP]

This project is a multi-center study of patients with mild to moderate essential hypertension in two phases. It is designed in order to [1] determine the efficacy and relative merits of different classes of anti-hypertensive drugs among Egyptians, and [2] find out whether the new generation of antihypertensive drugs [Angiotensin converting enzyme (ACE) inhibitors & Calcium channel blockers] are really capable of reducing target organ damage more than the far less expensive standard first line drugs [Diuretics & beta adrenergic blockers]. The first step will be a pilot study which is intended to set the standards and design the sample for the full-scale project.

Phase 1:

This phase of the trial aims at investigating the effect of using each of the following five drugs belonging to different groups on the control of hypertension, as well as their side-effect profile & patient compliance in a population of patients with established mild-to-moderate hypertension [Diastolic BP 95-109 mmHg in two visits over 4W] over a period of one year:

1- A long-acting diuretic, Hydrochlorothiazide or Indapamide.
2- A cardio-selective long-acting beta adrenergic blocker with low first pass effect and minimal lipid solubility, Atenolol.
3- An angiotensin converting enzyme inhibitor, Ramipril or Monopril.
4- A long acting alpha adrenergic blocker, Doxazocin.
5- A long-acting calcium channel blocker with potent vasodilator & little or no negative inotropic & chronotropic properties, Lacidepin or Amlodepin.

The initial part of this phase will be a pilot study that aims to establish the logistics & set the standards for the full scale multi-center clinical trial. The design of the pilot study will be detailed forthcoming.

Phase II:

This phase of the EMHTP aims at investigating the effect of using a long-acting ACE inhibitor [e.g. Enalapril, Quinapril or Ramipril] and a long-acting primarily vasodilator Calcium channel blocker [e.g. Amlodipin, Nifedipine, Lacidipin] in a multicenter randomized controlled trial against a standard antihypertensive regimen of proven efficacy and acceptable Side-effect profile [e.g. Atenolol & low dose hydrochlorothiazide] in patients who could be treated by any of these methods [i.e. have no contraindication to any of the three regimens under test] to examine differences in [a] end-organ status [Renal function, left ventricular systolic and diastolic function and muscle mass, myocardial ischemia, Carotid and vertebral arterial changes & fundi] [b) event rates [stroke, myocardial infarction, renal failure] and [c] cardiovascular morbidity and mortality by the end of a pre-set trial time [3-5 years].

E.H.S News & Calendar

* The first continuing medical education (CME) course of the Egyptian Society of Hypertension (EHS) was held on the 5th of January 1997. The chairman of organizing committee was Prof. Adel Zaki of Cairo University. The speakers at the meeting were:

1- Prof. Mohsen Ibrahim, President of the EHS.
The meeting was attended by 149 physicians in addition to some of the Registrars and house physicians of Cairo University's Hospitals. This good turn-out can be credited to proper preparation by a newspaper advertisement, posters in all University hospitals and the hospitals of both the Ministry of Public Health and the Armed Forces. In addition the printing of the booklet on "Hypertension its diagnosis and treatment" and its distribution among the participants helped ill arousing their interest.

Furthermore it was announced at the beginning of the meeting that there will be an examination at the end of the conference and a prize of LE 500 for the physician who scores the highest marks in the examination. The meeting started by an introductory talk by Prof. Mohsen Ibrahim on the usefulness of proper and accurate blood pressure measurement. This was followed by a series of lectures each of 20-30 minutes and comprising the definition of hypertension, investigations needed to define its presence and cause, a discussion of endocrine hypertension, hypertension in the elderly and how to manage emergency hypertension.

Following the lectures, there was an open discussion between the participants and speakers and this was followed by a film and colour slide, how to measure blood pressure. At the end of the conference a multiple choice questions examination (MCQ) was held for the participants.

Two physicians who scored the highest mark in the examination (22 out of 23) were Dr. Dalia El Rameessy and Dr. Sameh Salama each of whom received LE 250 for their excellent performance. The 4th Annual breakfast of the EHS during the Holy Month of Ramadan took place on 24th of January 1997 at the Ramesses Hilton Hotel and was attended by nearly all members of the Society.

After breakfast and welcoming of the guests Prof. Mohsen Ibrahim gave a word of thanks to the following 5 members for their distinguished services to the Society:

1- Engineer Fikry. Abdel-Wahab, Vice-President of the Executive Board of Mak Tourism Development Company for his supervision of the Fund-raising Committees activities.
2- Mr. Atv Dabbouss, Vice-President of the Arab International Batik for his Financial support to the Society.
3- Prof Mohamed Hamed, Editor of the EHS Newsletter for his diligent efforts in publishing the Newsletter regularly.
4- Prof. Khairy Abdel Dayem, Vice-Dean of the Faculty of Medicine, Am-Shams University for organizing the 2nd Meeting of the EHS in December 1996.
5- Dr. Hossam Kandil, for his creative production of a video film to alert the laety to the problem of hypertension.

This was followed by a resume of the Society's activities of the past year given by Prof. Mohsen Ibrahim, President of the EHS and then the heads of the following sub-committees made their comments:

1- Fund raising committee: Prof. Omar Awaad.
2- Training committee: Prof Adel Zaki.
3- Media and Advertising committee: Dr. Hossam Kandil and Dr. Hassan Khalid.
4- The drug efficacy committee: Prof. Hussein Pizk and Prof. Soliman Gharib.
5- The Newsletter committee: Prof. Mohamed Hamed.

Following that Prof. Wafaa El Aroussy, Treasurer of the Society gave a report on the promising financial situation of the Society.

Finally, a Ramadan talk on old memories and reminiscences was given by Prof. Abdel Moneim Hassaballah as the dessert of the meeting.

A number of society members have been assigned to receive free of charge the Journal (Hypertension) which is the official journal of the American Heart Association. This sentence has been offered both by the Pharmaceutical Firms of Egypt and the special boosting of the American Heart Association, which has agreed to deduct 50% of the subscription of the Journal for members of the EHS. Prof. Mohsen Ibrahim, President of the EHS is due to fly to...
Washington in April 1997 where he will lecture on cardiovascular risk factors in Egyptian Hypertensives based on data obtained from the NHP. The same talk will be delivered in June in Canada.

On his way back in July, Prof. Ibrahim will stop over in London, U.K., where he will give a talk on hypertension in Egyptian Nubians. Dr. Salwa Morcos received the first prize of the Young Investigator's Awards during the 24th Annual Meeting of the Egyptian Society of Cardiology for her work on Vascular hypertrophy in Hypertensives. An agreement has been reached with Glaxo-Wellcome Pharmaceutical Company which has generously offered to sponsor the Physician Education Program for the coming year.

This agreement entails that Glaxo-Wellcome will print out, free of charge, all programs concerning Continuing Medical Education, as well as reprinting the booklet "Short Review of Hypertension and Guidelines for its Management in Egypt". The company has also agreed to provide education tools and audio-visual aids to be made available at the lecture hall of the Society's premises.

The following continuing medical education meetings (CME) are scheduled to be held in the following cities at the dates appointed:
1- Mansoura 10-11th April.
2- Dammieta 10-11th July.
3- Port-Said 4 and 5th September.
4- Minia 6 and 7th November.

A letter has been sent to His Excellency the Minister of Public Health and Population, informing him of the above dates, which are being sponsored by Glaxo-Wellcome Company. So also has a letter been sent to all directors of medical services in the different Governorates of Egypt informing them of these coming events, and of the sponsoring of Glaxo-Wellcome Egypt of all expenses likely to be incurred by the attendants of these meetings. Glaxo-Wellcome will also present a prize for the best physician in each of the meetings mentioned above. The meeting of the European Society of Hypertension is due to take place in Milan, Italy from June 13th to 18th 1997. The general assembly of the EHS is to meet on the 16th of May 1997 for elections to the Board of Directors. Prof Mohamed Hamed, Editor of the Newsletter has had his name and C.V. published as a biography in the 14th Edition of the famous journal "Who's Who in the World" on page 567.
<table>
<thead>
<tr>
<th>Year</th>
<th>Month</th>
<th>Days</th>
<th>Meeting</th>
<th>Venue</th>
<th>Correspondence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>June</td>
<td>28</td>
<td>17th Council Conference of the world Hypertension league</td>
<td>Montreal Quebec Canada</td>
<td>Dr. Patrick J. Mulrow Secretary General, WHL Medical College of Ohio P0 Box 10008 Toledo, OH 43699-0008. USA</td>
</tr>
<tr>
<td>1997</td>
<td>July</td>
<td>20-24</td>
<td>12th International Interdisciplinary Conference on Hypertension in Blacks.</td>
<td>London England</td>
<td>International society on Hypertension in Blacks. Inc. 2045 Manchester Street. NE Atlanta, GA 30324-4110, USA e-mail: <a href="mailto:ishib@aol.com">ishib@aol.com</a></td>
</tr>
<tr>
<td>1997</td>
<td>August</td>
<td>8-13</td>
<td>2nd Hypertension Summer School</td>
<td>Castine, Maine. USA</td>
<td>Conference Coordinator</td>
</tr>
<tr>
<td>1997</td>
<td></td>
<td></td>
<td>2nd Hypertension Summer School</td>
<td>American Heart Association</td>
<td>7272 Greenville Avenue Dallas, TX 75231 - 4596, USA</td>
</tr>
</tbody>
</table>