MANAGEMENT OF ESSENTIAL HYPERTENSION WITH AN
INDIGENOUS DRUG, GERIFORTE

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INTRODUCTION

Essential hypertension is a major hazard to the health of the members of modern society. The exact aetiology of the rise in blood pressure is not yet clear, although heredity, age, stress and strain of life may have a causal relationship. This condition is more frequent in some communities and families than in others.

Due to sustained stress and strain the onset of hypertension may alter the course of essential hypertension. From its benign nature it may be converted into a malignant form. Essential hypertension is a heterogenous condition brought by various mechanisms. The severity and nature of hypertension seem to be related to personality traits and to depend upon external environment as well as genetic factors. More sustained hypertension has been observed when the stress has been of greater magnitude or of more prolonged duration.

According to Weiner Herbert¹ about 70% of essential hypertension can be accounted for by environmental factors, but environmental factors can be specified only when accurate incidence and prevalence figures for the disease are available. Hamilton et al.², Hoobler³ and Pickering⁴ now feel that essential hypertension is an inherited disease. After stress and strain in hypertensive cases, adrenocortical activation and increased secretion of 17-ketogenic steroids, 17-hydroxycorticosteroids and aldosterone have been repeatedly observed (Mills Lewis⁵ and Levi⁶).

According to Shapiro⁷ and Shapiro⁸, psychological factors do not by themselves cause hypertension. Stress and strain cause hyperstimulation of the limbic cortex and hypothalamus. As a result there is a series of neurohumoral changes which ultimately lead to vaso-constriction and hypertension. In short, no single factor can be held responsible for essential hypertension. Blood pressure levels vary continually and markedly throughout the day and night in normals and hypertensives; but apart from the cases of labile hypertension, the results can fairly be judged from the persistence of higher blood pressure levels.

The antistress properties of Geriforte are well known and well reported by many field workers and observers. We planned to investigate the role of Geriforte in the management of essential hypertension.

MATERIAL AND METHODS

Thirty cases of hypertension were selected from the psychosomatic clinic of the I.M.S. Hospital, Varanasi for the clinical trial of Geriforte. Out of the above, eighteen cases were from the essential hypertension group and the remaining were suffering from secondary hypertension with renal or cardiac involvement.

The essential hypertension cases showed the maximum psychic components like high anxiety level, high neuroticism index and maximum psychological stress.

Geriforte, two tablets 4 times a day were given for a period of three months. Successive follow-up studies were carried out by studying the clinical symptomatology as well as by measuring systolic
and diastolic blood pressure. The anxiety level was measured in all cases. The data obtained were statistically analysed and the results compared.

RESULTS AND DISCUSSION

The systolic and diastolic blood pressure levels are shown in Tables 1 and 2.

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<th>Table 1: Effect of Geriforte on systolic blood pressure levels</th>
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Comparison between initial values and after 3 months of therapy

Group A  Male  $p < 0.001$;  Female  $p < 0.001$

Group B  Male  $p > 0.05$;  Female  $p > 0.05$

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<th>Table 2: Effect of Geriforte on diastolic blood pressure levels</th>
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In the essential hypertension group the average systolic blood pressure was observed to be $174.60 \pm 11.50$ in males and $160.70 \pm 12.50$ in females. In the secondary hypertension group it was $180.60 \pm 16.45$ in males and $172.5 \pm 16.82$ in females. After three months of Geriforte therapy there was appreciable change in systolic blood pressure level but no significant change was observed in the secondary hypertension group. It seems that Geriforte has contributed well towards physiologic and psychogenic parameters that affect blood pressure. Constant anxiety and stress seem to be the factors accompanying blood pressure, which are related with more prolonged sympathetic discharge in hypertensives than in normal persons. Gallhorn\textsuperscript{9} pointed out that increased hypothalamic sympathetic discharges play a dominant role in initiating processes, which eventually lead to hypertension. The sympathetically induced renal ischaemia is one of the consequences of these central autonomic discharges.

Constant emotional disturbances produce hypertension through neuroendocrine changes. If anxiety and stress remain and persist for a longer time, there may be irreversible vascular damage. This is supported by the work of Vermeulen\textsuperscript{10}, Carne and Harris\textsuperscript{11}, Bear et al.\textsuperscript{12} and Davis et al.\textsuperscript{13}. The central and sympathetic nervous systems have varied actions on the heart, kidney and blood vessels.

Geriforte has a proven antistress property and it may prove useful in cases where there is emotional disturbance. It has no effect in those cases where there is already kidney or cardiac involvement. The mechanism of action of Geriforte is still unknown. It is likely to have some effect on the
catecholaminergic mechanism. The limitations of tranquillizers are well documented. It is possible that Geriforte may be acting to reduce the sympathetic activity, both centrally and peripherally.

SUMMARY
Thirty diagnosed cases of essential hypertension were selected for the clinical trial of an indigenous compound Geriforte. The drug was administered for three months, the dosage being 2 tablets 4 times a day. A significant clinical improvement was noticed in all the cases except in cases of secondary hypertension. A significant reduction in systolic and diastolic blood pressure was noticed in cases of essential hypertension. No endocrine, metabolic or neuralgic side effect could be observed even after continuous and large doses.

REFERENCES


