

*Study of individuals with special abilities attracted media attention and new groups of patients. The following selections point to how this work led to treatment of hypertensive patients with thermal biofeedback. Other biofeedback methods were used to lower blood pressures, but **those methods which use autonomic indices in the treatment process have shown themselves to be more successful.** A recent meta-analysis indicated that thermal biofeedback was the most successful of several biofeedback treatment approaches for essential hypertension. This process started in the following way . . . [Eds.]*

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SELF-REGULATION TRAINING FOR CONTROL OF HYPERTENSION

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ABSTRACT

Over the past 10 years controlled clinical studies have demonstrated that antihypertensive medication can prevent deaths from stroke, congestive heart failure, peripheral vascular disease, and kidney disease, even in patients with borderline (140/90-160/95) hypertension. Today, a new treatment method of psychophysiological self-regulation developed over a 5-year period suggests that many patients are able gradually to eliminate these medications while restoring or maintaining normotensive blood pressure levels. Follow-up indicates that a healthier homeostatic balance is achieved and stress management maintained without need for continued daily practice of self-regulation.

Subsequent to the writing of this report, an additional 50 patients have been treated with this method, both individually and in groups, with equally good results. Results indicate that 75-80 per cent of patients will find it possible to comply with the training regimen, as taught at The Menninger Foundation, and will become normotensive without drugs.

This is one of a series of articles that appeared in the proceedings of the Second National Conference on Emotional Stress and Heart Disease, published in the Journal of the South Carolina Medical Association, November, 1979.

In 1974 a medical writer for a Kansas City newspaper visited our laboratory to obtain information on biofeedback as a medical tool. To demonstrate that

biofeedback machines do nothing but feed back information about ongoing physiologic processes, we gave her a 30-minute training session with a portable temperature machine, using autogenic phrases we had adapted from Schultz and Luthe for relaxing the body and increasing the hand temperature, and let her take the machine home “to experiment with.” A week later she returned the machine, saying: “You may be interested to know that I got rid of my hypertension last week.”

She felt that stress was her real problem, and that her blood pressure, which had been averaging about 150/90 mm Hg (while taking diazepam for anxiety tension reduction), would decrease if she could relax. She also remarked: “Why shouldn’t it decrease? Hand warming means blood-flow control.” She had thus provided herself with a rationale for attempting self-regulation of hypertension.

She related that she had discontinued her medication after her visit with us, and made an appointment with her cardiologist to get a blood pressure check at the end of the week—it was normal when taken in the doctor’s office. He suggested that she continue without the diazepam and check with him again.

She was asked to get her doctor’s permission before continuing the practice of temperature control, as it could have been a labile reaction that might as quickly reverse. The incident was thought-provoking, though, and later it was mentioned as an unexplained event to a group of physicians attending a biofeedback workshop. One of them, a surgeon, made a semiserious comment: “Perhaps she gave herself a reversible sympathectomy.” He explained that before the appearance of modern drugs for controlling hypertension, he had often (in severe cases) cut the sympathetic nerves leading to the legs of hypertensive patients in order to induce vasodilation, which caused a significant lowering of blood pressure. Benefits were temporary and there were certain unpleasant side effects, but the procedure was often useful.

The surgeon asked if, when she practiced handwarming using the general whole-body autogenic phrases (relaxing progressively from the feet upward and warming her hands), she might have significantly warmed her feet, as in a sympathectomy.

Later, when a physician asked if we could help a patient with hypertension not satisfactorily controlled by medication (her blood pressure was averaging about 190/110 mm Hg), we agreed to try. This patient was a 38-year-old woman who had been on hypertensive medication for 16 years, and had also been taking medication for control of a kidney infection.

Results were highly encouraging. In 5 months her blood pressure was normal and her physicians had gradually reduced to zero her kidney and hypertension medications.

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