## A DEFINITIVE CURE OF EARLY ESSENTIAL HYPERTENSION

## Report of a Case GEORGE CRILE, M.D.

The patient, a young man, 22 years of age, was referred to me by Dr. H. Street of Litchfield, Ohio. He consulted me because of emotional instability, sweating, slight tremor, tachycardia, heart consciousness and inability to undertake a normal amount of work. In the course of the examination at the Clinic an early essential hypertension was discovered, the eye grounds exhibiting the changes seen in essential hypertension of Grade I. The blood pressure was 150 systolic, 100 diastolic. Here was a case in which neurocirculatory asthenia was associated with very early essential hypertension at the age of 22. I recognized the opportunity for performing an operation on the branches of the celiac ganglion and the adrenal glands on both sides in so early a phase of essential hypertension that I would not have suggested the operation for the essential hypertension alone, for this was not the disease that was causing the disability for which the patient sought relief. It was the neurocirculatory asthenia which brought him to the Clinic.

This operation was performed seven years ago. Doctor Street and I have followed this patient's progress with very great interest as we realized that in this case we had a rare opportunity to throw light upon an important question, namely: Is essential hypertension a pure pathological process like the growth of a fibroid tumor or may essential hypertension be the result of a pathologic physiology? In other words, is essential hypertension a curable disease in its early stage?

On May 1, 1939, Doctor Street was kind enough to send the patient to me for a check-up. Since the operation he has married, has two children, works every day, has charge of two gasoline stations. The flushing of the face, the sweating, the tremor and the tachycardia associated with the neurocirculatory asthenia seven years ago have completely disappeared. He is now emotionally stable. His hands are dry, the abnormal sweating and the tremor have disappeared.

Of particular and significant interest are the facts that his blood pressure is now 120 systolic, 70 diastolic, and that Doctor Ruedemann found the eye grounds normal. The changes in the fundus, characteristic of essential hypertension of Grade I, have disappeared. The patient, himself, reports that he has been able to work steadily, and that he has none of the old symptoms, but feels entirely normal.

This case supplies evidence of the neurogenic origin of essential hyper-

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tension, that is, that the disease is not a pathology of structure but is a pathology of function.

## COMMENT

I have three other cases similar to that of this patient, which we are following, in which denervation of the adrenal gland and celiac ganglionectomy were performed in the very early phase of hypertension, approximately the same phase as in the case of this patient.

These and other cases suggest an analogy with the late and early operation for cancer of the breast. It is well established that when cancer of the breast is operated upon as early relatively to advanced cancer as the essential hypertension in this case was relative to advanced hypertension a permanent cure is effected in practically every case. I refer to the case of early cancer of the breast in which no involvement of any tissue but breast tissue and no involvement of axillary glands are found. In this case of essential hypertension, which is an incurable disease in a late stage, a cure was established by an operation performed before the disease had reached an irreversible stage.

In our early experience with cancer of the breast, permission for operation often was not granted because surgeons had cured or benefited so few patients, largely because they were not given the opportunity to perform operations earlier and to a degree because surgeons themselves had not acquired a sound principle for operation. From our experience in 534 operations on 313 patients with essential hypertension. we find that we are in about the same position, for patients too often do not appeal for help until the essential hypertension has gone on to the malignant phase in which there is sclerosis of all the blood vessels of the body, headache, weakness, incapacity to work, pounding of the heart and the patient is awaiting the final heart attack or apoplexy or uremia to take him out of his misery. This corresponds to the advanced stage of cancer of the breast. Many years ago the surgeon saw almost as many cases of cancer of the breast in which there were fixation to the chest wall, frozen axilla, and in many cases ulceration, as he now sees of hypertension in the malignant phase.

If cancer of the breast is operated upon in the early stages it is curable. This case indicates that if essential hypertension is operated upon in its early stage it is equally curable.

The mortality rate of celiac ganglionectomy is now well controlled. In our last 74 operations there has been no death.