Department of Clinical Reports

POSTURAL HYPOTENSION*

An Autopsy Upon a Case

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IN OCTOBER, 1925, we reported† the clinical and pharmacological investigation of three patients who exhibited remarkable changes of blood pressures in response to changes of posture. Each patient complained of syncopal attacks after exertion or even upon standing erect for a few minutes; other features of their condition were: incapacity to perspire, a slow unchanging pulse rate, lowered basal metabolism, and slight and indefinite changes in the nervous system. The systolic blood pressures of these patients would drop precipitately 50 per cent or more upon changing from the supine to the erect posture, the diastolic fall being proportionate to the systolic.

As reported in our paper one patient died suddenly in June, 1925; the others then being alive and with no changes in their condition. Now, the third patient is still alive and in the same condition; but a second patient (L. H.) died at City Hospital September 25, 1926.

He had appeared to be in his usual condition until 4 P.M. that day; then on his way to the bathroom he fainted; this time, however, he did not recover consciousness but became worse and was pronounced dead in ten minutes.

A postmortem examination was made upon this patient September 28. Unfortunately it was incomplete, as examination of the brain was not permitted. The hypothesis upon which we attempted to explain the disorders in these three patients was paralysis of the sympathetic vasoconstrictor endings, and had there been any localized lesion to be found we feel it would have been in the brain or spinal cord. However, the results of the examination of the trunk are reported as furnished by Dr. J. R. Lisa, Pathologist of City Hospital, because they appear to show that two other hypotheses advanced to explain the condition observed, namely, suprarenal disease and status thymicolymphaticus, are not correct.

Autopsy No. 2510.—L. H., aged forty-three years, died September 25, 1926; autopsy September 28, 1926.

The body was five feet seven inches in height and about one hundred and thirty-five pounds in weight. Rigor mortis was not present. There was nothing

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†Am. Heart Jour., 1925, i, 73.

significant externally. Scrotum contained both testes. After incision, thoracic and abdominal organs were examined in situ; thyroid gland was hypertrophied; there was no evidence of persistent thymus; both adrenals were present and normal in size.

Several large lymph glands adherent to the right bronchus on section were found filled with greenish-yellow caseous material indicative of long-standing tuberculosis.

Lungs: Right three lobes weighed 700 grams; left two lobes, 550 grams. Both were crepitant throughout and showed no areas of consolidation; upon transection there was no evidence of anything abnormal. Pleural surfaces were smooth and glistening throughout.

Heart was markedly dilated on both right and left sides. Muscle wall was thinned out, with evidence of marked fatty degeneration and infiltration. Valve leaflets of both sides showed no evidence of pathology. Pericardium was normal and a normal amount of pericardial fluid was present.

Liver weighed 1350 grams and showed no evidence of abnormality externally or upon transection.

Gall bladder contained one ounce of bile; there were no stones present, ducts were patent and mucous membrane was normal.

Kidneys were small; the right weighed 110 grams, left 150 grams. Fetal lobulations present. Right kidney capsule stripped easily, relation of cortex to medulla, one to three. There was a small hard area one centimeter in diameter in the cortex with two or three similar but smaller areas, probably fibromas.

Spleen weighed 240 grams, had a normal capsule and normal appearance on transection.

Pancreas, stomach, and intestine appeared normal throughout.

Prostate was much smaller than normal, about one inch in diameter and upon section showed marked atrophy.

Bladder was normal and contained 200 c.c. urine.

Histology: Microscopically, the suprarenals were quite normal, as were the other organs with the exception of the bronchial lymph nodes which showed old caseous tuberculosis.

"*Anatomical diagnosis:* Chronic myocarditis, acute dilatation of the heart, atrophy of the prostate, chronic tuberculosis of lymph nodes."