

tions nearly every day. There were frequent variations up to 26 millimeters. Now if in by no means a small proportion of cases there may be considerable normal fluctuations from day to day we should be very careful in coming to conclusions in regard to the action of drugs on blood pressure in man. It should never be forgotten that any changes observed after the administration of a drug in disease may be due to the natural course of the malady."

To this I would add the question: How much of the variations may be physiological?

*Pathological Variations.*—Each disease has its own particular effect on the system, and the blood pressure so varies that it must be studied in connection with the disease. But if in an apparently healthy person it is found that the systolic pressure is constantly ten millimeters or more above normal, or the diastolic ten below, the diet, mode of living, etc., should be carefully investigated and if after proper regulation of these the hyper or hypotension continues we may be pretty safe in concluding even in the absence of other evidence that some pathological process is at work and it will be wisdom to examine the case from time to time to ascertain what it is, and in the meantime add some medicinal treatment which will be referred to later.

*The Relative Importance of Diastolic and Systolic Readings.*—The constant load the vascular system has to carry is of first importance, and hence no matter what other information is obtained as to the arterial pressure, this should if possible be found. The diastolic pressure is the measure of this load and therefore should be regarded as the measure of arterial tension. It is also the most constant and indicates the load the arteries have all the time to carry and the resistance the heart has to overcome as it begins its ventricular systole. Its variations also correspond more closely to the mean pressure.

The following illustrates the constancy of the one and the variability of the other. Three men run a race and their systolic pressures were increased 10, 18 and 37 millimeters, respectively, while the diastolic remained the same. In another race in which the ages were 30, 35 and 50, the diastolic remained the same for ages 30 and 50, while the man of 35 had his slightly lowered. Their systolic pressures were increased 25, 20 and 27, respectively. I saw a patient in consultation this spring with a systolic pressure of 190, a diastolic of 90, and the vanishing point of the pulse-beat under the stethoscope was 25. I saw him again in three weeks when his health had markedly improved, his systolic pressure was 224, the diastolic 95, and the vanishing point 20. Thus while the systolic increased 24 millimeters, the diastolic had increased only 5. These are not isolated examples of the constancy of the diastolic pressure, as may be verified by anyone.