

vertigo, headache, easy fatigue, lassitude, high systolic blood pressure and general nervous instability. All of these symptoms are exaggerated by a slight amount of exercise. Not all patients have a complete syndrome, but the chief complaint is precordial pain. Thrills are common, and their presence led us at the outset to think, in some cases, that we were dealing with mitral stenosis, but the thrill is generally systolic in time, and the other phenomena of stenosis are absent." Such cases are of importance because of their frequency, especially in the army, where until very recently there has been no category of light duty suitable for them, and therefore, more soldiers have been discharged than would have been really necessary. The treatment based on the experience of thirty-nine cases out of a total of 200 at the base hospital Camp McClellan, Ala., treated by the authors is described. Twelve per cent. of them were returned to full duty but one could not stand the work and was discharged. Four patients out of the eighty-nine were returned to light duty. The treatment used was that recommended by Lewis, that is, graduated exercises, and the point they have to emphasize is that the exercises brought about no improvements in patients whose condition was constitutional. They have become convinced that neurocirculatory asthenia is due to an incurable fundamental nervous instability. The vast majority of the patients give a family history of nervous disorder, and the cardiovascular and nervous symptoms go hand in hand. Neurocirculatory asthenia as seen in the training camps occurs in fundamentally unstable nervous individuals with resultant instability of the vasomotor system. The patients that were returned to duty had the same symptoms at the end of treatment as at its beginning. The blood pressure studies of these cases is of interest. When the patient is up and about the systolic pressure is high and the diastolic generally normal. After exercise the systolic pressure rises greatly and not infrequently the diastolic pressure drops. A frequent feature is the persistence and loudness of the fourth sound heard with the stethoscope when taking the blood pressure. In all cases the pulse rate has been accelerated after exercise and emotion has the same effect. There are some sensory precordial symptoms. In their conclusions the authors call attention to the importance of the early recognition of neurocirculatory asthenia by recruiting officers and regimental surgeons. Some cases become evident immediately. Others only after a few weeks of intensive training. Lately they have used the exercises more for diagnostic purposes than as a method of treatment.

**Duran, B. L.** ARTERIOSCLEROSIS AND VASCULAR CRISES. [Prog. d. 1. Clinica, July, 1918.]

Vascular crises, as Jelliffe and White have pointed out, may occur in the brain, the chest, the abdomen or in the legs. This Duran confirms and discusses. Intermittent claudication occurs chiefly in the muscles of the legs. The chest group make up angina pectoris and acute edema

of the lung. Abdominal crises occur after emotional stress. The cerebral group show attacks of sudden unconsciousness without convulsions. Pallor is followed by vasodilation and sweating. These attacks recurred every three or four weeks in the patient described. They gradually became more intense with slight residuals in speech and twisting of the head. They first developed at 50. In other cases these vascular crises were accompanied with transient monoparesis or hemiparesis, amnesia and aphasia. Treatment should aim to ward off excitement and stimulants for the circulation, while reducing autointoxication to render the nervous system less irritable and reduce the blood pressure. Tobacco and coffee seem most injurious of all stimulants in these cases. With acute pulmonary edema, Duran always found venesection useful, supplemented by tonics for the heart hampered by the pressure. In the cerebral type stimulation of the peripheral circulation is the main thing. Carbonated baths are useful in the incipient cases of arteriosclerosis. Although Duran calls attention to the emotional etiology as of paramount importance he neglects it or assumes a purely simplistic attitude towards it in therapy. These are cases preëminently to be studied psychoanalytically.

**Binet, A.** ACTION OF ADRENALIN ON THE GASTROINTESTINAL TUBE.  
[*Presse médicale*, August 5, 1918.]

The experimental basis for the observations of this author include: Removal of the adrenals which produces certain alterations in the gastroenteric tract; adrenalin is known to modify the blood supply, secretion, and motility of this tract. Extirpation of the adrenals cause gastric ulcer to develop, especially after bilateral extirpation. Ten hours after operation, marked hypotension having appeared, ulcers form with great rapidity. These lesions appear at the more usually observed localities—pylorus, prepylorus, and duodenum. They are round or oval, and measure about 2 cm. in diameter. They stand in a certain relationship to gastric acidity, because sodium carbonate may prevent their development. Authors have attempted, of late years, to isolate a type of adrenal dyspepsia and a gastroenteric form of adrenal insufficiency. Such conditions must stand in some relationship with the functions controlled by adrenalin—vascularity, secretion, and motility. Adrenalin, when injected hypodermically, causes vasoconstriction in the alimentary canal, and may be made of value in intestinal hemorrhage. Despite its vasoconstrictor action the drug is known to stimulate the action of the gastric juice, or rather to increase the secretion of free hydrochloric acid. In regard to motility, the drug appears to activate some portions of the gut and to exert the opposite action on other portions. Thus it appears to cause contraction of the esophagus and to relax the intestine, or portions of it. All of the contradictory finds can be explained by the size of the dose, which produces a given effect.