

failure of the circulation taking place during the later stages of the disease, or actually after the febrile reaction has subsided, and due to a myocarditis. The former is characterized clinically by softness and emptiness of the pulse, and by a rapidly failing blood pressure. The latter is characterized by smallness, irregularity and inequality of the pulse, with indications of some dilation of the chambers of the heart, and developing signs of mitral insufficiency. The former tends to terminate rapidly in death; the latter develops more slowly and eventually all the indications of a failing compensation can be noted. At the autopsy we find no change of any moment in the heart muscle in the cases of vaso-motor paresis, while in the other class there are the signs of an interstitial myocarditis. In the past there has been much confusion of these two conditions and drugs have been unnecessarily and unjustly blamed. For successful treatment it is essential that we recognize what the condition is that we are dealing with before we decide on the therapeutic measures to be employed. In the early stages of vaso-motor collapse pure cardiac stimulants cannot be expected to have much, if any, value. Digitalis is the only exception, and it may do good, not as a cardiac stimulant, but owing to its action on the vaso-motor center and peripheral vessels. Atropine in small doses has also a definite action on the medullary centres and small arteries, and, I think, I have seen some benefit from its administration hypodermically 1-100 gr. twice a day. Strychnine also may be employed, but only for its general effect, and as a stimulant to the respiratory apparatus. Caffein has some value and is superior to camphor. The introduction of normal saline solution is capable of raising blood pressure for a limited period, and it may be associated with small doses of adrenalin. The action of both, however, is fleeting. It seems almost unnecessary to say that nitroglycerine and its allies are distinctly contraindicated. As a mechanical measure raising the foot of the bed twelve or eighteen inches, may be of distinct benefit favouring the return of the blood to the heart.

With our present knowledge undoubtedly one of our most potent vaso-motor stimulants is cold, acting as a peripheral stimulant. It may be employed either in the form of a cold bath or ice-pack or locally. From the experiments of Romberg and Pässler we note that all stimulants have a rapidly lessening value as the stage of collapse approaches. Its action is, therefore, chiefly by way of prevention, and its value is to be reckoned, not by the fall in temperature so eagerly looked for by nurses, and which we know is always followed by more or less reaction, but by a rise in blood pressure, and fall in the frequency of the pulse. Much