constant and are even more difficult to extinguish. The central nervous system thus appears to have lost its "plasticity." After periods of anoxia lasting 16 to 20 minutes, conditioned reflexes are never restored.

E. M. Smirenskaya, from Negovskii's laboratory, presented some noteworthy data that suggest the importance of the stimulation of vascular interoceptors (by means of arterial infusions) in the restoration of cardiovascular activity in dogs after clinical death from hemorrhage. She utilized Novocain injections into various parts of the cardiovascular system as a means of blocking the interoceptors. Electrocardiographic studies indicated that stimulation of these interoceptors in any part of the arterial tree may lead to increased electric activity of the heart. Under conditions of anoxia, such stimulation (for example, dissecting out an artery without local anesthesia) may lead to fibrillation. This point may bear further investigation.

T. T. Shcherbakova and M. K. Martsinkevich, from Bryukhonenko's laboratory, reported on their experiments on dogs, using an "autojector," a pump that delivers oxygenated blood into an artery (not antidromically, but in the normal direction of blood flow) and removes blood for oxygenation from any peripheral vein. They claimed that their dogs could be revived even after a period of clinical death lasting for as long as 24 minutes and that these dogs remained normal for years. These claims were received with some skepticism by most of the other participants of the conference. Bryukhonenko himself (a noted surgeon) was not present at the conference, although he was invited. He was criticized for his failure to report detailed descriptions of his method and of his experimental results.

F. F. Svidler (Odessa) reported on his method of artificial respiration involving electric stimulation of the phrenic nerve in cats and dogs, including the stimulation of motor points in the region of the neck.

I. P. Petrov and E. V. Gubler (Leningrad) presented some data on the effect of central nervous system depressants and of hypothermia on survival after exposure to various periods of cerebral anoxia. Soporific doses of central nervous system depressants had a beneficial effect, while larger doses had a deleterious effect. Hypothermia was beneficial. There appeared to be some potentiation between hypothermia and soporifics. These results were interpreted in terms of I. P. Pavlov's concept of "protective inhibition" of the central nervous system.

There was considerable disagreement among the members of the conference on whether the arterial infusions should be rhythmic or continuous. It was argued by some that rhythmic infusions are more likely to produce effective stimulation of the vascular interoceptors, but no convincing data were presented.

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New Books

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