ate blood loss and free of other complications, cures were effected when treated with our solutions. Excessive hemorrhage, however, reduced number of cures but there is reason to believe that added blood and plasma transfusions would increase recovery. In general, three to five minutes after the infusion was begun, the pulse became perceptible, and soon became steady and rhythmic. Blood and pulse pressure rose quickly, reaching normal levels toward the end of the infusion. an increase usually of 50-60 mm. Pallor gradually disappeared, the pupils contracted, and respiration returned to normal rate, rhythm, and amplitude. Sensitivity and motor activity were restored. Usually the patients began to be aware of their surroundings, to stir, and to complain of pain. They talked willingly about their wounds but when assured, felt better, and were calm. Within 20 minutes they gradually became somnolent and fell into normal sleep lasting from two to four hours, during which blood pressure sometimes fell 10-15 mm. and the pulse became somewhat indistinct. Both the pulse and the blood pressure returned to normal as soon as the patients awoke. It was significant that thirst increased abruptly 10-15 minutes after the infusion; patients continually drank water until they fell asleep, but awoke momentarily at in-Most patients lost tervals to drink. this thirst several hours after they finally awoke while others drank more than 2-3 liters within 4-5 hours. Diuresis increased. In most cases, improvement progressed and many of the young patients were hungry on awakening. The prompt 1-2° C. rise in temperature during the infusion is indicative of improvement in oxidative processes and metabolism in cases with hypothermia (34-35° C.). As a rule, the temperature during the first two days after recovery from shock rises 1-2° C. above normal and then gradually subsides. . . . Patients at the battalion mobile field hospital could be followed for only 3-7 days after which they were evacuated to divisional field hospitals, but in Tashkent, they were followed for 1-3 months. In all cases, recovery was uneventful. Patients observed for a longer period showed no ill-effects."

J. C. M. C.

GINSBURG, E. M.: Pathogenesis and Treatment of Lobar Pneumonia. Am. Rev. Soviet Med. 2: 28-36 (Oct.) 1944.

"Neither the underlying etiology nor the pathogenesis of lobar pneumonia have yet been determined. . . . The role of the nervous system in pneumonia and other diseases has been repeatedly emphasized in the medical literature and has been proven experimentally in the work of A. D. Speransky and his colleagues. . . . His investigations led him to conclude that a relationship exists between pneumonia and nerve changes in the basal ganglia of the brain and the cervical and thoracic segments of the spinal cord. He then tried to affect these nerves by acting upon other closely related nerves. . . . Within six vears, 385 cases, divided into four groups, were treated by this method: 169 cases between 1935 and the beginning of 1939; 72 cases transferred from another hospital in the spring and fall of 1939: 49 cases in Karelian military hospitals during the Finnish campaign; and 95 cases in the V. I. E. M. Dierzhinski branch hospital between December, 1940 and June, 1941. In this last group, the majority of the cases were very severe and were complicated by jaundice, meningitis, or The results obtained in nephritis. treating the four groups by the Speransky method were compared with those obtained by palliative and sulAbstracts

fonamide therapy applied to two equivalent control series.

434

"The method of treatment is simple and easily applicable under all conditions. Approximately 60-70 cc. of 0.5 percent novocaine are injected intradermally into a rhomboid area extending sagittally from the third cervical to the fourth thoracic vertebra and covering the medial halves of the scapulae. A 10-cc. syringe with a narrow gauge needle is used for the injection. usually done only once. Cases treated at the very onset of the illness deserve special comment. This report will, therefore, be devoted to the 49 cases in the armed forces at Karelia, admitted in the early stages of the illness. This group consisted entirely of men between the ages of 19 and 32, the majority being from 19 to 24 years old. Only seven of these cases had a history of pneumonia or pleurisy; of these, two had had pulmonary tuberculosis, three pneumonia, and two pleural effusion of unknown origin. The onset of pneumonia was acute in all but two cases which were preceded by influenza, although the clinical course was identical with the other cases of lobar pneumonia. . . . X-ray studies of 26 patients, before and after nerve infiltration, revealed five cases Serial studof bilateral pneumonia. ies of the blood count in most cases showed a decrease in the number of lenkocytes following nerve infiltration. With few exceptions, our patients exhibited grave forms of pneumonia. In 13 cases there were noted definite complications of the central nervous system, as evidenced by delirium and the presence of psychoses. Local novocaine infiltration was done on the second day in 16 cases, on the third day in 24 cases, on the fourth day in 6 cases, and in 3 critical cases on the fifth, eighth, and twelfth days, respectively. . . .

"Analysis of the 49 cases established the fact that the temperature began to fall and reached normal 12-48 hours after novocaine infiltration. brile period was shortened and the pneumonia ran an unusual course of two to four days' duration. The type of defervescence also differed, for in 17 cases the temperature curve resembled one of atypical lysis, while in 30 cases it followed a more critical course. The fall of temperature was not accompanied by prostration or collapse. In 47 patients the effect of the new method of treatment also hastened resolution of the pathologic process. Only one of the 49 cases died. This was a case of bilateral pneumonia, in which novocaine infiltration was administered on the twelfth day of illness when other methods of treatment had failed. It was further noted that the patient's health invariably improved soon after treatment was given. By the fourth day, cough and expectoration had disappeared completely while pulmonary and other signs had X-rav studies returned to normal. confirmed the speedy resolution of pulmonary shadows. The number of white blood cells and their relative proportions also returned to normal and the sedimentation rate gradually fell. Another striking feature was the absence of complications or sequelae in the 47 cases and no untoward effects from novocaine infiltration. . . . Because of its efficacy and its applicability regardless of environment, this procedure provides the general practitioner and particularly the military physician with a valuable remedy for pneumonia. Further studies are now under way to prove the effectiveness of the method in the so-called catarrhal form of pneumonia and in cases with a prolonged course in which repeated infiltration is indicated."

J. C. M. C.