

of the tissue, conditioned by the state of blood circulation, and the vascular tonus of the peripheral arteries. The electrical signals which are obtained are magnified and registered on the ECG. Prior to the operation thin lead electrodes are placed on the lower third of the patient's shin. These are connected by a special cord to the rheovasograph and the electrocardiograph which is placed at the feet of the anesthetist. The anesthetist can easily watch the continuous dynamics of the rheovasographic changes in the course of the operation, watching the light bundle of the electrocardiograph. The possibility of using rheovasography in surgery was studied during surgery and in the postsurgical period in 2 patients who underwent gastric resection. Data were obtained which show that rheovasography helps to evaluate the state of the patients during various stages of surgery. Rheovasography manifests changes which occur at the moment when the surgeon manipulates in zones which are rich in neural receptors (the duodenal region and the cardial section of the lesser omentum). The given series of rheovasograms shows that rheovasography which is made during the period of surgical intervention enables one to judge the efficacy of anaesthesia. As soon as the hand of the surgeon touched more widely innervated areas, the rheovasogram quite clearly reflected the reaction of the vessels to the pain impulses. This characteristic of rheovasography can prove to be very valuable in the development of new surgical methods and very helpful in the evaluation of new narcotics. Changes in the picture of the rheovasogram reflected the rise of the vascular tonus. The rheovasogram constantly reflected the degree of completeness of anaesthesia of highly sensitive regions. (Karelin, V. A., and Potapov, E. G.: *Possibility of Using the Rheovasographic Method for the Registration of Peripheral Circulation During Surgery*, *Klin. Med. (Moskva)* 35: 112 1957.)

**ARTERIAL PATENCY.** By means of a series of pneumatic cuffs applied to an extremity, any two of which can be connected simultaneously to a transducer, the registration of pulse volumes from various parts of

a limb has been found to be an accurate and simple method of demonstrating local vascular patency and change in blood vessel tonus after induced vasoconstriction or vasodilatation. Special value of the method lies in the fact that pulse tracings reflects the deep as well as the superficial circulatory status. Serial tracings are presented which show typical patterns for vasospastic disease such as poliomyelitis vasoconstriction and Raynaud's disease in contrast to those predominately organic, e.g. distal and diffuse arteriosclerosis, aortic obstruction, panarteritis nodosa and advanced scleroderma. The status of circulation can be determined with accuracy in both proximal and distal portions of a limb. The method lends itself to determining the extent of the vasospastic component in both pure vasospastic disease and obliterative disease and arriving at a rational course of medical or surgical therapy for individual cases. (Edwards, E. A., Ottinger, L., and Ruburti, U.: *Pulse Registration as a Means of Evaluating Peripheral Vascular Patency and Vasomotor Activity*, *Am. J. Cardiology* 4: 572 (Nov.) 1959.)

**SHOCK** Shock can be remedied only by those means which eliminate paresis of the capillaries and normalize the blood flow in them. Recommended for this purpose is the preparation ferrofusin, the basic active substance of which is colloidal iron, prepared by the method of irradiation of pure iron with a quartz lamp. The composition of this preparation is: sodium chloride 9.0, sodium bicarbonate 0.2, glucose 1.0, salicylic sodium 0.1, gelatin 10.0, colloidal iron 47 to 50 mg., distilled water 1,000.0. The basic constants are: specific gravity 1.11; viscosity at 20 degree 1.7, pH 7.4, osmotic pressure 8 atmospheres. Intravenous or intraarterial administration of this preparation produces capillarostenosis, which restores blood circulation. Ferrofusin yields a good therapeutic effect in shock of varied aetiology. This preparation is cheap and simple to make. At room temperature it keeps for a year, and has no adverse side effects. (Goldberg, I. M.: *Pathogenesis and Therapy of Shock*, *Sborn. Rab. Voronezhsk. Med. Inst. (Voronezh)* 30: 5, 1958.)