

added. 103 transfusions were preceded by intravenous administration of 200 mg. tetamon (tetraethylammonium, a synthetic ganglion-blocking agent) and of these 41 showed no reaction whatsoever, 61 showed a reaction much milder than could have been expected, and in one instance the reaction was marked. Twenty other transfusions were preceded by administration of 50 mg. of hexathonid (hexamethonium iodide, a more active ganglion-blocking agent); in 12 cases no reaction was observed and in the remaining 8 cases it was mild. This activity of ganglion-blocking agents shows that excessive production of acetylcholine is one of the main pathogenetic factors in the production of transfusion reactions. (Novachenko, N. N.: *New Methods of Prevention of Transfusion Reactions Based on Their Pathogenesis*, *Vrac. Delo* 8: 873, 1956.)

**TRANSFUSION REACTIONS** The serum levels of total protein and electrophoretic protein fractions were estimated (a) in 24 patients who had nonhemolytic reactions to blood transfusion; (b) in 18 healthy blood donors; and (c) in 34 patients who had taken blood transfusion well. Subnormal total protein levels were found most often in the patients who had reacted badly to blood transfusions. Where there is no urgency, the patient's serum proteins should be determined prior to transfusion. When the serum protein, and especially serum albumin, is low, the patient should be given washed erythrocytes instead of whole blood. (Polak, A., and Fiser-Herman, M.: *Serum-Proteins in Patients with Non-Haemolytic Transfusion Reactions*, *Lancet* 1: 1042, (May 17) 1958.)

**TRANSFUSION** When faced with serious blood loss which cannot be replaced rapidly enough with intravenous transfusions, the use of intra-aortic transfusions may be lifesaving. Displacement of the intestinal tract onto the abdominal wall and use of a specially curved needle facilitate entrance into the aorta. Five cases are presented in which intra-aortic transfusion preserved life. (Rive, H. L., and others: *Intra-Aortic Transfusion*, *Obst. & Gynec.* 11: 537 (May) 1958.)

**PARENTERAL FLUID DOSAGE** A rule of thumb based on weight alone (rather than on body surface area), when combined with appraisal of daily weights and clinical appearance, including skin turgor and frequency and volume of urination, is sufficiently accurate. For infants less than 1 year of age,  $60 \pm 15$  ml. of water per pound ( $132 \pm 33$  ml. per kilogram) is given each 24 hrs.; for children 1 to 5 years,  $50 \pm 15$  ml. per pound ( $110 \pm 33$  ml. per kilogram) is given; for children above 5 years, approximately  $40 \pm 15$  ml. per pound ( $88 \pm 33$  ml. per kilogram) is given. In the presence of normal renal function, isotonic sodium chloride up to one-third of the total daily fluids is well tolerated; the remaining volume consists of 5 or 10 per cent dextrose in water. (Oliver, W. J., and others: *Lack of Scientific Validity of Body Surface as Basis for Parenteral Fluid Dosage*, *J. A. M. A.* 167: 1211 (July 5) 1958.)

**TETANUS** Two identical groups of patients were treated similarly, except that one received chlorpromazine and the other phenobarbital. There was no statistically significant difference in the outcome of the treatments of the two groups. However, chlorpromazine was easier to manage than barbiturates, because it controlled the tetanus convulsions without causing loss of consciousness or of clinically noticeably depressed respiration. (Laurence, D. R., and others: *Clinical Trial of Chlorpromazine Against Barbiturates in Tetanus*, *Lancet* 1: 987 (May 10) 1958.)

**NEUROMUSCULAR BLOCK** Gastrocnemius response to sciatic stimulation was measured in anesthetized cats. The response to suxamethonium and tubocurarine differed between symmetrical muscles. Increased rates of stimulation and fatigue both increased sensitivity to blocking agents. During recovery from suxamethonium block some muscles showed a transitory failure to react to each stimulus. (Wislicki, L.: *Effects of Rate of Stimulation and of Fatigue on Response to Neuromuscular Blocking Agents*, *Brit. J. Pharmacol.* 13: 138 (June) 1958.)

**NEUROMUSCULAR BLOCK** Experimental work with cats showed that hypo-