

terpreted as evidence of the neurogenic nature of this shock, to be considered a secondary complication of acute cardiac failure rather than a direct effect of it. (Selzer, Arthur and Bradley, Herbert W.: *Observations Concerning the Origin of Shock Associated with Acute Cor Pulmonale*, *Am. J. Med.* 22: 163 (Jan.) 1957.)

**PULMONARY VALVE INSUFFICIENCY** Because of possible adverse effects in creating pulmonary insufficiency in man when operating for the relief of pulmonary stenosis, 13 dogs were studied after total pulmonary insufficiency was surgically produced. None developed heart failure in six to ten months. Four dogs tolerated strenuous exercise. In two-thirds of the animals there was an increase in right ventricular and pulmonary artery pressure. There was definite hypertrophy of the right ventricle. (Ratliffe, J. W., and others: *Physiologic Effects of Experimental Total Pulmonary Insufficiency*, *Surgery* 41: 43 (Jan.) 1957.)

**TRANSPLANT DONORS** It is known that transplants of tissues from one human being to another are usually unsuccessful except in twins and patients with agammaglobulinemia. This is due to immunological reaction on the part of the recipient to antigens in the tissues of the donor. The chances of finding a compatible transplant donor by trial and error are negligible. (Boyd, W. C.: *Chances of Finding Compatible Transplant Donors*, *Surgery* 40: 1007 (Dec.) 1956.)

**CONTACT DERMATITIS** Severe contact dermatitis was observed in 8 medical personnel following repeated exposure of the hands to chlorpromazine. Contact with chlorpromazine during preparation and injection sensitized 27 of 91 nursing personnel of hospital. (Tilley, R. F.: *Contact Dermatitis with Chlorpromazine*, *New England J. Med.* 225: 1046 (Dec.) 1956).

**HYPNOTIC** Methyprylone ("noludar," 2,4-dioxo-3,3-diethyl-5-methyl-piperidine) has been found to be a safe and effective sedative hypnotic in doses of 200 to 400 mg., being well tolerated by older patients in

whom barbiturates are apt to produce confusion and sometimes delirium. (Stewart, J. S.: *Clinical Trial of Methyprylone, Piperidine Hypnotic*, *Brit. M. J.* 1465 (Dec. 22) 1956.)

**LEAD POISONING** Animal studies revealed that some of the erythrocytes of lead-poisoned dogs would remain suspended in a column of the supernatant plasma, and the Coombs test was uniformly more positive on these cells. Twenty-nine workers with chronic asymptomatic lead poisoning were studied, whose serial hematologic evaluations revealed anemia or reticulocytosis. Blood samples from ten workers showed a negative Coombs test. The other nineteen also showed a negative Coombs with the whole blood. However, 79 per cent of the nineteen showed a positive Coombs test in the superior portion of the columns of suspended red cells. (Sutherland, D. A., and Eisentraut, A. M.: *Direct Coombs Test in Lead Poisoning*, *Blood* 11: 1024 (Nov.) 1956.)

**QUINIDINE** In 611 patients treated for atrial fibrillation with quinidine, 20 (3.3 per cent) died suddenly. Severe organic heart disease, congestive heart failure, associated grave illnesses and lack of an arbitrary dosage limit, increase the possibility of a fatal outcome. (Thomson, G. W.: *Quinidine as Cause of Sudden Death*, *Circulation* 14: 757 (Nov.) 1956.)

**OXYGEN TOXICITY** In rats, chlorpromazine affords definite protection against the toxic action of oxygen at high pressure (85 p.s.i.). There was less pulmonary hemorrhage and edema and a lower mortality than seen in the controls. Reserpine was less effective than chlorpromazine. (Bean, J. W.: *Reserpine, Chlorpromazine, and the Hypothalamus in Reactions to Oxygen at High Pressure*, *Am. J. Physiol.* 187: 389 (Nov.) 1956.)

**HYPONATREMIA** Patients with an excess of water rather than an actual total or systemic deficiency of sodium, have been included under the term hyponatremia. At one extreme is absolute sodium depletion of the total organism, and at the other is

absolute excess of water; hence the synonym, water intoxication. In between lies a series of disturbances one can call sodium-water disproportion. (*Elkington, J. R.: Hyponatremia; Clinical State or Biochemical Sign? Circulation 14: 1027 (Dec.) 1956.*)

**HEMOPHILIA** The best treatment of a hemophilic patient who is to undergo operation is the use of fresh blood or fresh whole plasma. The effect of blood transfusion lasts only 4 to 6 hours and multiple transfusions are necessary. Cannulation of a vein with a polyethylene catheter is preferable to repeated venipunctures. (*Jones, R. K., and Knighton, R. S.: Surgery in Hemophiliacs, with Special Reference to Central Nervous System, Ann. Surg. 144: 1029 (Dec.) 1956.*)

**PROGRESS** Some of the recent improvements in modern anesthesia are as follows: premedication (Phenergan and Dromoran); Oxygen ("Oxygen-nitrous"—not "nitrous-oxygen"); antagonists to drugs (Tensilon to curare; and Flaxedil, Nalline and Lorfan to the opiates; Megimide to the barbiturates, Ritalin and Wyamine to shorten the periods of anesthesia); anesthesia for children (rectal sodium Pentothal plus Phenergan); balanced anesthesia; postoperative pain (Phenergan and Dromoran); block procedures; shock (plasma expanders); adrenal insufficiency (cortisone—"cortef"); hypotension (Arfonad and Hexamethonium); and hypothermia. (*Lundy, John S.: Contributions of Modern Anesthesia to Improvement in Surgical Technique, J. Internat. Coll. Surgeons 26: 664 (Dec.) 1956.*)

**INTERPRETATION** There is a lack of scientific attitude in current medical writing. This lack is chiefly responsible for the many controversial reports about the therapeutic effectiveness of procedures and drugs. The author reviews the problem of bias, particularly as it applies to clinical research, and emphasizes the indications for the use of placebo or blank medications in clinical investigations. Charts and data illustrating the pitfalls and ad-

vantages of methods of approach are detailed. (*Gruber, C. M.: A. M. A. Arch. Int. Med. 98: 767 (Dec.) 1956.*)

**AXON REGENERATION** Although long considered virtually an impossibility, at the present time it is clear that regeneration can occur in the mammalian central nervous system. Three mechanisms have been demonstrated: (1) in the very young mammal, outgrowth can occur from neuroblasts undifferentiated at the time of making the lesion; (2) in adults regeneration often takes place from severed axons of cells of the central nervous system or ganglia outside the neuraxis; (3) sprouting of new processes from intact central axons after damage and degeneration of adjacent neurons has been demonstrated. Little worthwhile information concerning central axonal regeneration in human subjects has been obtained and all reports of functional restitution after spinal cord severance are highly speculative. (*Windle, W. F.: Regeneration of Axons in the Vertebrate Central Nervous System, Phys. Rev. 36: 427 (Oct.) 1956.*)

**AORTA-ATRIUM SHUNT** A shunt between the left subclavian artery and the left atrium was produced in thirteen dogs. These experiments demonstrate that an increase in the load on the ventricle during diastole can cause failure when the systolic pressure is unchanged. However, if the load is increased gradually, the myocardium can adapt to increased pressure and volume loading in a short time. This shunt produces some effects similar to mitral regurgitation and some similar to a systemic A-V fistula. (*Rodbard, S., and others: Acute Dynamic Effects of Shunt Between Systemic Artery and Left Atrium, Am. J. Physiol. 187: 458 (Dec.) 1956.*)

**CAROTID SINUS** Forty normal men were studied for electrocardiogram changes induced by carotid sinus stimulation. A wide variety of changes and induced symptoms were observed, and ventricular asystole of 2 to 5.7 seconds duration was produced in nine of the subjects. Exact reproduction of symptoms upon carotid sinus