time her critical hypertension was reduced 114 times. Complete anuria followed sulfathiazole and penicillin treatment for lobar pneumonia in a 13 year old boy. He responded to continuous caudal anesthesia and made a complete recovery. Four children with acute nephritis were treated with continuous caudal analgesia in order to reduce arterial hypertension. When successful levels of analgesia were achieved a reduction of hypertension followed. Of the 35 patients, 10 died. The prompt recovery of several patients with acute pulmonary edema after all of the usual forms of therapy had failed could, undoubtedly, be ascribed to the blocks. More investigative work needs to be done with experimental renal clearance studies under various levels of block. 15 references.

F. A. M.

JOHNSON, B. R. M.: *Intravenous Anaesthesia.* Anaesthesia 2: 134–137 (Oct.) 1947.

In the search for drugs suitable for intravenous anaesthesia many barbituric acid compounds were tried and discarded until Weise introduced Evipan in 1932. It was replaced by pentothal which was introduced in 1934. An ideal drug for intravenous anaesthesia probably should possess five cardinal features: (1) rapid and easy control, (2) a good margin of safety between the anaesthetic and danger dose, (3) blood concentrations compatible with safety should produce sensory and muscular paralysis, (4) rapid excretion without tissue damage, and (5) pleasant administration and recovery.

The short acting thio-barbiturates go a long way toward this ideal. The chemistry of these drugs is complex. Their distribution in the tissues is somewhat obscure. Respiratory depression is produced in direct proportion to the dose. There is a slight vaso-dilatation which quickly passes off when the drugs are excreted. There is a slight fall in the systolic blood pressure. There is no demonstrable effect on the liver and the kidneys do not seem to be seriously affected. There is no production of haemo-concentration and the absence of effects on metabolism, body fluids and circulation is in marked contrast to the effects of ether. The exact fate of the thio-barbiturates after injection is unknown. Contraction of the gut following administration of the drug may cause welling up of stomach contents with fatal results. Prolonged recovery after long surgical procedures with thio-barbiturates as the sole anaesthetic may be considered as a contraindication.

F. A. M.

JOHLIN, J. M.: *The Effect of Phenobarbital on the Action of Insulin.* Endocrinology 40: 426–429 (June) 1947.

"The objects of the present experiments were (1) to determine the effect of phenobarbital on the blood sugar level of insulinized rabbits, (2) to observe the tendency of such animals to go into convulsions, and (3) to note if the administration of insulin to rabbits altered their response to electrical stimulation. . . . The administration of both sodium phenobarbital and subconvulsive doses of insulin to rabbits causes the animals to convulse, lowers the level of blood sugar below that produced by subconclusive doses of insulin alone, and prolongs the return of the level of blood sugar to a normal state. The administration of insulin to rabbits in sufficient amounts to bring these animals near the convulsive state does not alter their threshold of response to the stimulating action of a galvanic current applied to a suitable motor point on the skin, or that to the stimulating action of a faradic rectangular current flowing from the occiput to the mouth." F. A. M.