TABLE I.

No.	Ca mg. per 100 cc.	P mg. per 100 cc.	Ca:P	
21	11.65	5.10	2.28	24 hours after treatment, no tetany.
	6.22	6.78	0.917	Tetany and spasticity.
36	11.30	4.44	2.545	Day before operation.
	5.60	6.36	0.880	5 days after op. First attack.
	9.60	4.75	2.022	15 days after op. 24 hrs. after treatment. No tetany.
	5.44	5.87	0.926	17 days after op. Severe tetany.
43	11.47	5.71	2+	2nd day before op.
	8.87	5.01	1.5	2nd day after op. No tetany.
	5.88	8.20	0.717	3rd day after op. Mild tet. 2nd attack.
	5.19	9.43	0.551	7th day after op. Severe tetany.

3736

The Influence of Amytal Upon Blood Sugar Content.

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The statement of Page[1] that during amytal narcosis no perceptible changes in blood sugar content occur was so suggestive for new possibilities in the study of carbohydrate metabolism as to warrant a repetition of the experiments of Page. In our work, the rabbit

TABLE I.
The Influence of Amytal upon Blood Sugar Content in the Rabbit.

Rabbit Number	1	3	4	6
Weight in grams	2000	2200	2200	2100
Method of introduction of drug	Per os	Subcutaneous	Intraperitoneal	Intraperitoneal
Mg. per kilo	80	80	50	100
Blood sugar content in mg. per 100 cc. of blood.				
Before injection of drug	122	100	107	140
30 minutes later	138	130	131	140
45 minutes later	148	145	185	198
1½ hours later	138	185	155	267
2 hours later	—	—	—	336
3 hours later	—	286	160	—
4 hours later	—	—	—	285
5 hours later	123	221	—	Died

served as the experimental animal. In a series of 10 experiments 8 gave evidence of a distinct hyperglycemia which usually appears within an hour, or somewhat later, and may last for several hours. The hyperglycemia is induced by doses ranging from 50 to 100 mg. per kilo of amytal whether given by mouth, subcutaneously or intraperitoneally. Since the completion of our work Weiss[2] has shown that amytal produces hyperglycemia also in the cat and dog.

Illustrative examples of the experiments are given in Table I.

[1] Page, I. H., *J. Lab. and Clin. Med.*, 1925, ix, 194.

[2] Weiss, S., PROC. SOC. EXP. BIOL. AND MED., 1926, xxiii, 363.

3737

Concentration of Arsenic in Blood Subsequent to Serial Administion of Neoarsphenamine.

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A number of investigations* have shown that when arsphenamine and neoarsphenamine are intravenously introduced, the arsenicals rapidly disappear from the blood stream, part apparently going to immediate excretion, and part to storage in the tissues. Usually, however, these results have been obtained from 1, or in some instances from 2 or 3 injections of the arsenical. To determine whether the number of injections would play any rôle in the disposition of arsenic we have followed the quantity of arsenic present in the blood after serial administration of neoarsphenamine to dogs, maintained upon a constant fixed diet. The drug was introduced into either the jugular or femoral vein, and blood was drawn from an artery, usually of the leg. Each animal received 0.3 gram neoarsphenamine at intervals of 4 days. The arsenic was determined in 10 cc. samples of blood, by the combined methods of Chittenden and Smith, and Sanger and Black, the total quantity in the body being derived from a calculation of the blood volume from the body weight. The results are detailed in Table I.

* References to the literature may be found in Kolmer, A. J., *Chemotherapy*, p. 538 *et seq.*