TABLE III.

Plasma Sample No.	——Ascorbic Acid Mg. %—— 2 ml. Portion	0.2 ml. Portion
1	1.75	1.82
2	0.70	0.84
3	0.98	1.12
4	0.54	0.53
5	1.35	1.15
6	0.86	0.76
7	0.63	0.77

Although the values are not identical, they are in as close agreement as can be expected considering the absolute amounts of ascorbic acid contained in the samples being titrated.

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8536 P

Pressor Reactions and Gastric Ulcer.

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The local effect of single and repeated spasm of the small blood vessels apparently ultimately results in alterations in the tissues that can be demonstrated objectively. This has been shown by us in production of experimental bacterial endocarditis and also observed in studies of bacterial localization in the central nervous system. Vascular spasms were induced by single and repeated injections of pitressin (betahypophamine).

Our experiments were carried out on dogs and rabbits. The dose most useful for our purpose was found to be 20 pressor units per 5 kg. of weight of the dog and 10 pressor units per 2 kg. of weight of the rabbit. The pitressin was administered intravenously from one single dose to 50 doses in dogs and from 5 to 19 doses in rabbits. The repeated injections were given twice a week. Five dogs and 2 rabbits died, the rest were killed at certain time intervals.

The gastrointestinal tract was examined and the following data obtained:

In 12 of the 35 dogs there were macroscopic pathological changes in the stomach (multiple hemorrhages, erosions and small ulcers),

one of these 12 dogs revealed a typical large stomach ulcer; in one dog there were lesions in the duodenum with multiple hemorrhages and erosions.

Of 18 rabbits, 8 revealed similar findings. Among these perforated ulcer of the stomach was observed in 2 cases.

Macroscopically and microscopically, the pathological lesions produced in the gastrointestinal tract of the animals resemble those seen in human cases.

These findings coincide with the results obtained by Dodds, *et al.*,[1,2] in their observations on the effects of the acetone picric acid extract of the posterior lobe of the pituitary body in monkey, cat, rabbit, guinea pig, rat and mouse.

8537 C

Hematologic Studies on Gastrectomized Monkeys

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During the course of our studies of the effects of gastrectomy on various species of animals, 8 of a group of 10 *Macacus rhesus* monkeys were gastrectomized, 2 being retained as controls. The age at which gastrectomy was performed could not be ascertained.

After recovery from the operation the same varied diet which included milk, bananas, oranges, apples, boiled potatoes, carrots, peanuts, etc. was fed the gastrectomized and control monkeys. Blood studies consisting of red blood count, hemoglobin (Newcomer), hematocrit and Price-Jones counts were made at frequent intervals. One X-ray film of the bones was made of each monkey.

Our studies showed that after an initial weight loss that lasted for approximately 80 days the gastrectomized monkeys slowly gained in weight to become relatively constant about 240 days after the operation. Five of the 8 gastrectomized monkeys are still alive 606, 396, 356, 347, and 228 days after operation. Three of the 5 have not regained their preoperative weight level, but are apparently in good health. The gastrectomized monkeys had an

[1] Dodds, E. C., Noble, R. L., and Smith, E. R., *The Lancet*, 1934, **2**, 918.

[2] Dodds, E. C., Hills, S. M., Noble, R. L., and Williams, P. C., *The Lancet*, 1935, **1**, 1099.