

treatment. At the time the reticulocyte peak was reached the Van den Berghs had fallen to 0.6 to 0.8 units. In all of these the reticulocyte count fell on incubating the cells in plasma taken before treatment, but not in that taken during the period of high reticulocytosis. In the first 2 cases the proportion of cells to plasma was as 1 to 2 during incubation; in the third case a 1 to 10 suspension was also observed and showed a more striking fall in reticulocyte count in the plasma taken during the acute stage (Table 1).

TABLE I.

The reticulocyte percentage after incubation for 24 hrs. at 37° C. of cells obtained during remission in plasma obtained during remission (Plasma B) and that obtained before treatment (Plasma A). In case P, Plasma A obtained on March 8, plasma B on March 12; in case S, A on April 2, B on April 9; in case M, A on September 11, B on September 16. Counts in plasma B were never lower than in fresh blood unless incubated 30-50 hours.

Reticulocyte Counts After Incubation.

	Case P	Case S	Case M	Case M.*
Plasma A	24	25	19	6.5
Plasma B	29	34	26	28

*Ratio of washed cells to plasma in these tubes 1:10, in all others 1:2.

This phenomenon can not be explained by increased reticulocyte resistance due to treatment, but suggests the presence of a hemolysin, to which reticulocytes especially are vulnerable, in the cases of active primary anemia, and the disappearance of this substance during remission.

7686 C

Absence of Vasoconstrictor Substance in Blood of Rats with Renal Hypertension.

WILLIAM DOCK AND DAVID A. RYTAND.

From the Department of Medicine, Stanford University Medical School, San Francisco.

Using an adaptation of Griffith's and Collins' method for measuring systolic pressure¹ in rats which had developed hypertension as a result of renal insufficiency,² we have studied the effect of destroying the central nervous system on the blood pressure of normal and of hypertensive rats. The blood pressure was determined under light ether anesthesia, and then, after inserting a tracheal cannula con-

¹ Griffith, J. Q., Jr., and Collins, L. H., Jr., *Am. Heart J.*, 1933, **8**, 671.

² Chanutin, A., and Ferris, E. B., Jr., *Arch. Int. Med.*, 1932, **49**, 767.

nected with a device for arterial respiration, the rat was pithed and decerebrated. A cord, passed around the neck under the skin and trachea, was drawn tight crushing the cervical spine and ligating the carotid and vertebral vessels. Through a thoracic laminectomy a wire with a beaded tip was passed up and down the spinal canal. In this way the central nervous system can be destroyed quickly and with little blood-loss, and the preparation, without artificial warming, will last for 5 hours. The blood pressure remains constant during the first half hour, falling slowly thereafter. We followed the pressure during the period from 2 to 30 min. after pithing and decerebration in 10 normal and in 10 hypertensive male rats. The control level in the former was 117.6 mm. Hg average, varying from 85 to 136 mm.; in the latter the preoperative range was 151 to 209 mm., average 176.4 mm. After destroying the central nervous system the average level in the normals was 55.3 mm. Hg., range 42 to 66 mm., while the hypertensive group averaged 54.5 mm., range 45 to 66 mm. In the animals with destruction of the nervous system epinephrine and pituitrin, given intraperitoneally, caused a marked but transient rise in pressure. We therefore conclude that whatever pressor substance may be present in the plasma of rats with renal hypertension has no vasoconstrictor effect but acts through the vasomotor center. In some instances the initial pressure determinations after pithing were made within 2 minutes after beginning the denervation, and the fall of pressure was immediate and not gradual as would have been the case from cutting off the inflow of such pressor substances as epinephrine or pituitrin.

7687 P

Influence of Intermedin on Growth of Mouse Melanoma.

KANEMATSU SUGIURA.

From the Huntington Fund for Cancer Research, Memorial Hospital, New York.

It has been reported¹ that repeated injections of aqueous extracts prepared from fresh whole pituitary glands (sheep and cattle) or from fresh anterior lobes, had a slight but distinct stimulating effect upon the growth of the Passey mouse melanoma. With the Flexner-Jobling rat carcinoma, the Bashford mouse carcinoma 63, and the Rous chicken sarcoma, no stimulating action was observed.

¹ Sugiura, K., and Benedict, S. R., *Am. J. Cancer*, 1933, **18**, 583.