of these fractions prepared from fresh liver contain substances which are favorable for hemoglobin and red cell regeneration in simple anemia in dogs. In round numbers we may say the watery fraction produces per 2 week period in excess of about 20 grams—the alcoholic fraction perhaps a little less than 20 grams of hemoglobin and the liver residue perhaps 20 to 30 grams of hemoglobin per 2 week period above control levels. The sum of the three extracts would be about 60 to 70 grams hemoglobin per 2 week period. This corresponds to 80 to 100 grams hemoglobin per 2 week period which would be about the average value of the fresh liver fed to the same standard anemia dogs.

[1] Whipple, G. H., Robscheit-Robbins, F. S., and Hooper, *Am. J. Physiol.*, 1920, liii, 236.

[2] Robscheit-Robbins, F. S., and Whipple, G. H., *Am. J. Physiol.*, 1925, lxxii, 408.

[3] Minot and Murphy, *J. Am. Med. Assn.*, 1926, lxxxvii, 470.

[4] Whipple, G. H., *Arch. Int. Med.*, 1922, xxix, 728.

[5] Cohn, Minot, Fulton, Ulrichs, Sargent, Weare and Murphy. Paper read before the Federation of American Societies for Experimental Biology, Rochester, N. Y., April, 1927.

[6] Whipple, G. H., and Robscheit-Robbins, F. S., *Am. J. Physiol.*, 1925, lxxii, 395.

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Effect of Extracts of Pars Tuberalis of Hypophysis on Urine Secretion.

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Saline suspensions or boiled acidulated extracts of the bovine *pars tuberalis* when injected intravenously into rabbits under paraldehyde anesthesia produce a diuresis differing from that produced by injection of posterior lobe extracts. The resulting diuresis comes on without a marked rise of blood pressure and without the latent period of 3 to 5 minutes (during which the flow of urine is entirely suppressed) which are characteristic accompaniments of posterior lobe diuresis.

Diabetes insipidus is held[1, 2] to be due to injury of the base of the brain in the region of the *tuber cinereum*. Critical examination of the figures of Bailey and Bremer,[2] and of Curtis,[3] shows that in practically every instance the injury has involved the *pars tuberalis* of the hypophysis.

Bourquin[4] has shown that experimental *diabetes insipidus* in dogs is an irritation rather than a deficiency phenomenon. Slight cauterization of the floor of the third ventricle produces the diabetes but deeper cautery destroys it. She further concludes that "the diuresis must be due to a substance produced at the site of the causative disturbance" for the *diabetes insipidus* "runs its typical course after trans-section of the spinal cord at the level of the eighth cervical vertebra, double vagotomy below the diaphragm, and paralysis of the parasympathetic nervous system with atropin."

If the cause of experimental *diabetes insipidus* is to be ascribed to the irritative production of a hormone in the floor of the third ventricle, it is no less reasonable to suppose that the hormone is derived from the *pars tuberalis,* which is distinctly a glandular structure, than that it is produced by brain tissue.

The participation of the *pars tuberalis* in the causation of *diabetes insipidus* has not been ruled out by those who injure the floor of the brain between the optic chiasm and the mammillary bodies. In this connection the action of *pars tuberalis* extracts on urine secretion is of interest.

This is a preliminary report.

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[1] Camus, J., and Roussy, G., *J. d. physiol. et de path. gén.*, 1922, xx, 535-547.
[2] Bailey, P., and Bremer, F., *Arch. Int. Med.*, 1921, xxviii, 773-803.
[3] Curtis, G. M., *Arch. Int. Med.*, 1924, xxxiv, 801-826.
[4] Bourquin, H., *Am. J. Physiol.*, 1927, lxxix, 362-376.

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Influence of Pituitrin on Diuresis Variously Induced.

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The diuretic action of extracts of the pituitary body was first described by Magnus and Schafer.[1] Their finding has been confirmed repeatedly. Von den Velden[2] showed that pituitrin may exert an opposite or antidiuretic effect. Reasoning that the polyuria of *diabetes insipidus* was caused by pituitary deficiency, he further used pituitary extracts successfully in the control of the polyuria. Recent papers by Smith and McClosky,[3] Fromherz,[4] and Stehle[5] give a review of the literature. As yet there is no general agreement as to the explanation of the apparently contradictory results.