ings, based on data obtained from different sources. Our figures were obtained from the cord and postnatal blood of the same babies, whereas Bakwin compared the results of 67 examinations made during the first 10 days of life with calcium determinations on 300 cord bloods performed some years previously.

Serum inorganic phosphorus tests were done on a few cases but are not sufficiently numerous to warrant reporting.

Studies of other factors, inorganic phosphorus, total protein, blood cell concentration, feeding, etc., are being continued to determine what circumstances may influence the calcium level variations.

We are indebted to Dr. Alexander Martin, Head of the Pediatric Service of the Lincoln Hospital for allowing us to obtain the blood used for this study.

9907

Failure to Demonstrate Pressor Properties in Extracts of Blood from Hypertensives.

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The theory that hypertension may be due to the accumulation of a humoral pressor substance or substances of renal origin has been supported by the finding of increased concentrations of pressor material in kidneys from patients with various hypertensive diseases[1] and from dogs with experimental renal hypertension,[1, 2, 3] Against this hypothesis is the failure to find increased pressor properties in the blood of subjects with hypertension.[4] Recent chemical studies[5] indicated that the pressor principle in rabbits' kidneys is related to the globulins. This work suggested the possibility of con-

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1 Prinzmetal, M., and Friedman, B., PROC. SOC. EXP. BIOL. AND MED., 1936, **35**, 122.

2 Harrison, T. R., Blalock, A., and Mason, M. F., PROC. SOC. EXP. BIOL. AND MED., 1936, **35**, 38.

3 Harrison, T. R., Blalock, A., Mason, M. F., and Williams, J. R., Jr., *Arch. Int. Med.*, 1937, **60**, 1058.

4 Friedman, Ben, and Prinzmetal, M., in press.

5 Pickering, G. W., and Prinzmetal, M., *Clinical Science*, 1938, **3**, 211.

centrating the hypothetical pressor substance in blood by similar chemical procedures. The present report is concerned with the vasomotor properties of extracts of human and of dog's blood containing protein fractions prepared in the following way.

Approximately 100 cc of freshly drawn blood was defibrinated and centrifuged. The serum was drawn off and half saturated with ammonium sulfate, and the resulting precipitate dialyzed against tap water until free of sulphate. The dialysate was then dried in a Florsdorf-Mudd apparatus[6] and taken up in a small volume of saline. The final solution was tested by intravenous injection into small unanesthetized dogs with Van Leersum (carotid) loops, and the effect on the blood pressure noted.

Observations were made on the blood of 5 patients with persistent hypertension, and 3 dogs with hypertension due to renal ischemia.[7] In no instance was a well-defined pressor response noted.

The failure to find the renal pressor material in the blood stream may be due to a number of possible causes, such as inefficient extraction, insufficient amount of the pressor substance in the blood stream, or differences between the chemical properties of renal pressor substance in man and rabbits. It is also possible that ultimately the pressor substance may prove to have no relation to hypertension.

9908

Measurement of the Inhibitory Action of Anticoagulants.

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A method for measuring the inhibitory activity of heparin on the clotting of blood has been worked out by Fischer and Schmitz.[1] Instead of using as Howell[2] does an arbitrary effect as a unit for the inhibitory activity, this method gives a curve of the action of varying concentrations of the anticoagulant, and from the equation for this curve the activity of the substance is defined. From the activity (k) obtained in this way a unit for inhibitory substance has been

6 Florsdorf, E. W., and Mudd, S. J., *J. Immunology*, 1935, **29**, 389.

7 Goldblatt, H., Lynch, J., Hanzal, R. F., and Summerville, W. W., *J. Exp. Med.*, 1934, **59**, 346.

1 Fischer, A., and Schmitz, A., *Z. Physiol. Chem.*, 1932, **210**, 129.

2 Howell, H., *Bull. Johns Hopkins Hosp.*, 1928, **42**, 199.