

Studies of the Blood-Cerebrospinal Fluid Barrier to Cortisol in the Dog

J Clin Invest. 1961;40(12):2125-2125. <https://doi.org/10.1172/JCI104426C1>.

Correction

Find the latest version:

<https://jci.me/104426C1/pdf>



rections proposed here do not lead to a corrected A-V difference that differs from the simultaneous A-V difference at time t by more than the experimental error of measurement of an A-V difference, it is probably safe to regard the functions as constant.

The effect of the non-steady state on simultaneous A-V differences means that a solitary A-V difference is uninterpretable. The immediate history of the system must be known. A single pair of A-V differences determined simultaneously on two substances passing through the same bed is also not properly useful for comparing the relative metabolism of the two substances unless it is known that the distributions of their transit times are identical.

REFERENCES

1. Cori, C. F., Fisher, R. E., and Cori, G. T. The effect of epinephrine on arterial and venous plasma sugar and blood flow in dogs and cats. *Amer. J. Physiol.* 1935, **114**, 53.
2. Visscher, M. B., and Johnson, J. A. The Fick principle: Analysis of potential errors in its conventional application. *J. appl. Physiol.* 1953, **5**, 635.
3. Fishman, A. P., McClement, J., Himmelstein, A., and Cournand, A. Effects of acute anoxia on the circulation and respiration in patients with chronic pulmonary disease studied during the "steady state." *J. clin. Invest.* 1952, **31**, 770.
4. Fick, A. Ueber die Messung des Blutquantums in den Herzventrikeln. *S.-B. phys.-med. Ges. Würzburg* 1870, p. 16.
5. Grant, R. T. Observations on the blood circulation in voluntary muscle in man. *Clin. Sci.* 1938, **3**, 157.
6. Stephenson, J. L. Theory of the measurement of blood flow by the dilution of an indicator. *Bull. math. Biophys.* 1948, **10**, 117.
7. Meier, P., and Zierler, K. L. On the theory of the indicator-dilution method for measurement of blood flow and volume. *J. appl. Physiol.* 1954, **6**, 731.
8. Zierler, K. L. A simplified explanation of the theory of indicator-dilution for measurement of fluid flow and volume and other distributive phenomena. *Bull. Johns Hopk. Hosp.* 1958, **103**, 199.
9. Zierler, K. L. Circulation times and the theory of indicator-dilution methods for determining blood flow and volume *in* Handbook of Physiology, vol. I., sect. 2, Circulation. American Physiological Society. In press.
10. Sherman, H. On the theory of indicator-dilution methods under varying blood-flow conditions. *Bull. math. Biophys.* 1960, **22**, 417.
11. Zadeh, L. A. Frequency analysis of variable networks. *Proc. IRE* 1950, **38**, 291.
12. Andres, R., Cader, G., and Zierler, K. L. The quantitatively minor role of carbohydrate in oxidative metabolism by skeletal muscle in intact man in the basal state. Measurements of oxygen and glucose uptake and carbon dioxide and lactate production in the forearm. *J. clin. Invest.* 1956, **35**, 671.

CORRECTION

On page 2000 of the article entitled "Studies of the Blood-Cerebrospinal Fluid Barrier to Cortisol in the Dog" by Nicholas P. Christy and Robert A. Fishman (*J. clin. Invest.* 1961, **40**, 1997), lines 9 and 10 in the right-hand column should read: "Samples of plasma and CSF were taken at hourly intervals. Constant levels of cortisol in plasma and CSF were attained after 4 hours and maintained for the succeeding 5 hours."