STUDIES OF WATER METABOLISM IN ESSENTIAL EPILEPSY.*

By G. D. GREVILLE, M.A., and Dr. TUDOR S. G. JONES.
Biochemical Department, Runwell Hospital, Essex.

(*Abstract.*)

(1) The diurnal water exchange has been studied in two patients for approximately four months, and in a third patient for one month. Similar measurements were made on two non-epileptic patients as controls. No certain evidence was obtained that the urinary excretion was decreased before a fit and increased afterwards, as has been often claimed. The water balance has been determined daily as completely as is practicable and the method for this is described. The daily excretion of chloride in the urine under constant salt intake at two levels has also failed to show any relation to the incidence of fits.

(2) Serial investigations have been made of the concentration of constituents of the blood which might be affected by changes in the water content of the organism, viz., protein and non-protein nitrogen in the plasma, hæmoglobin and total solids in the whole blood. Here again the variations are apparently unconnected with the incidence of fits, contrary to the findings of other authors.

* Read at the Annual Meeting of the Royal Medico-Psychological Association at Brighton, July 13, 1939. This paper, further developed, will be published in a later number of the Journal.

https://doi.org/10.1192/bjp.85.358.903 Published online by Cambridge University Press