ASSAY OF PLASMA ANTIDIURETIC HORMONE LEVELS IN CASES OF ECLAMPSIA

by

V. K. SINGH,* M.S.; M. SHARMA,** M.D.; V. SAMANT,*** M.D.

S. S. MISHRA,**** M.D.

In an earlier communication, we have reported the levels of plasma ADH in cases of toxaemia of pregnancy. The present communication is an extension of the earlier work and embodies our findings on the plasma ADH titres in cases of eclampsia.

Material and Methods

Patients of eclampsia admitted to the Kamla Nehru Hospital, Allahabad, were chosen for the study. In all, fifteen cases were available during the period of one year. A thorough clinical, obstetric and fundus examinations were done. All the cases had at least one eclamptic seizure.

Collection of Blood & Assay

Blood was collected immediately on admission and before any medication was started in the hospital. It was concentrated according to the method of Bisset *et al,* (1967) and assayed for ADH according to the method of Boura and Dicker (1953) using Lysine-8-vassopressin as the reference. These methods have been described in detail in our earlier communication. Thioglycollate inactivation and persistence of response after cyproheptadine was seen for determining the nature of antidiuretic substance. Quantities of ADH in plasma were extrapolated from log dose response curves.

Observations and Results

The clinical and obstetric findings of patients are given in Table 1.

The mean ADH levels per ml of plasma were found to be 145.66 micro units ± 3.42; the range being 121.7 to 168.0 units per ml. The values are statistically significant, the probability being less than 0.001.

Representative kymographic record is given in Figure 1.

FIGURE - 1

Showing antidiuresis with serum of eclampsia.

*Registrar in Obstetrics & Gynaecology.

**Reader in Pharmacology.

***Retired Professor of Obstetrics & Gynaecology.

****Professor of Pharmacology, M.L.N. Medical College, Allahabad (India).

Received for publication on 9-2-1973.