# Clinical Notes and Cases.

## A NOTE ON THE USE OF NEPHRITIN IN PSYCHOTICS.

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THE action of the internal secretions of the kidney is a debatable subject, but the following brief note seems to show that nephritin (Reed and Carnrick) has a definite if limited use in certain psychotic cases with renal insufficiency.

Its use would seem to be confined, at least in chronic nephritic conditions, to those cases with azotæmia which fail to respond to stringent dietary restrictions; in these, with an adequate dosage of at least 20 tablets a day, the improvement is often remarkable. The preliminary and concurrent limitation of diet to milk and water in equal parts, with glucose and fruit-juice, is essential. The mental improvement is proportional to the degree of confusion present due to renal toxæmia, and where this is absent no change is produced in the psychosis.

If dieting alone produces a marked improvement, then nephritin will do no further good even if the renal condition is still unsatisfactory. The azotæmia of wasting conditions is unaffected by nephritin.

### ILLUSTRATIVE CASES.

(1) Female, æt. 57, with advanced cardio-renal degeneration. Admitted in a markedly confused, noisy and restless condition. The heart was generally enlarged, arteries tortuous and thickened, blood-pressure 200/130, pulse-rate 95. Albumen was present throughout in repeated samples of urine.

On the second day the blood-urea was 139 mgrm.%. On the sixth day, despite the most careful regulation of the diet, given in tube feeds, the blood-urea was 156 mgrm.% and the general condition unchanged. Nephritin was commenced on the eighth day and on the sixteenth day the blood-urea had fallen to 32 mgrm.% and the clinical improvement was proportionate, the patient already appearing convalescent. The nephritin was stopped, and thereafter the diet was slowly increased. A month later the blood-urea was 44 mgrm.%, but with a further course of nephritin there was little change in the blood-picture, the urea content rising to 47 mgrm.%. The patient was quiet and pleasant, with some residual dementia.

(2) Female, æt. 39. Marked confusion with excitement. Blood-pressure 130/85, pulse-rate 90. Urine albuminous. On the fourth day the blood-urea was 61 mgrm.%, and this fell to 38 mgrm.% in a fortnight following restriction of diet. Clinical improvement was marked. Broncho-pneumonia developed with a full

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return of symptoms and the patient's condition was regarded as grave. The blood-urea rose to 62 mgrm.%, and a fortnight later, although the temperature had been normal for one week, the urea-content was still 67 mgrm.%. On full doses of nephritin the reading was 46 mgrm.% in 3 days, 34 mgrm.% in 7 days and 18 mgrm.% in 10 days. This patient had been on a strict diet for 3 weeks. Clinical improvement was coincident and the patient was later discharged.

(3) Female, æt. 59. Persistent hypomania following an acute attack. Five months after admission and following a rapid early improvement the patient remained hypomanic, but was then slowly improving. There was a history of chronic nephritis, the urine always contained albumen and the blood-pressure was 145/80. At this time the blood-urea was 66 mgrm.%. A course of nephritin with partial dietary restrictions produced no change. A diet of milk and water with glucose and fruit-juice reduced the blood-urea to 42 mgrm.% in 6 days. A further course of nephritin on the same diet left the blood-urea at 47 mgrm.% a week later.

(4) Female, æt. 23. Puerperal, admitted 3 weeks after the birth of her child. Mental condition suggested a depressed schizophrenic. Blood-pressure 150/110, pulse-rate 90. The urine contained much albumen with sugar, acetone, indican, and a heavy growth of *B. coli* on culture. On the fourth day the blood-urea was 62 mgrm.%. After a fortnight the blood-urea had fallen to 37 mgrm.%, but the urine contained albumen and granular casts. There was no mental improvement, and an ordinary diet was now given. Four months after admission the urine still contained albumen, and the blood-urea was 44 mgrm.%. The blood-pressure had fallen to 90/62. A strict diet was ordered and ephedrine prescribed, and in three weeks the blood-pressure had risen to 120/80 and the blood-urea was 35 mgrm.%. An intensive course of nephritin produced no change, and a month later the blood-urea was 33 mgrm.%, being still 37 mgrm.% four months after that. There had been no mental change, although the patient gradually improved and was discharged twelve months after admission.

(5) Female, aged 52. Agitated melancholia with increasing cachexia. Four months after admission the blood-urea was 90 mgrm.%, and regulated tube-feeds and diet reduced this to 50 mgrm.%, but a further course of nephritin failed to lower this figure. This patient died eight months after admission.

The blood for the urea estimations was taken before the mid-day meal in all cases.

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