

# 9<sup>TH</sup> MULTIDISCIPLINARY INTERNATIONAL Conference of Biological Psychiatry

## «Stress and Behavior»

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### CONFERENCE ABSTRACTS

#### 6. GENERAL QUESTIONS: PSYCHIATRY OF STRESS

##### TREATMENT OF POLYDIPSIA-HYPONATREMIA WITH UREA

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The polydipsia-hyponatremia syndrome in patients with severe mental illness is difficult to control and there is no established effective therapeutic approach. We investigate the effect of oral daily intake of large amounts of urea to prevent hyponatremic episodes.

**Method:** Seven patients were treated during 4 to 18 months with urea (0.3–0.9 g/kg daily). Five of these patients were schizophrenic. Body weight variation between morning and evening was determined before and during the therapy in five patients. The dose of urea was increased if morning SNa was lower than 132 mmol/l.

**Results:** Urea therapy increased morning SNa (from  $127.5 \pm 3.4$  to  $136.5 \pm 2.4$  mmol/l;  $p < 0.01$ ) and urine osmolality (from  $86 \pm 40$  to  $159 \pm 60$  mOsm/kg H<sub>2</sub>O;  $p < 0.01$ ) without changes in water intake or urine volume excretion as attested by the level of urinary creatinin concentration. Body weight variation decreased from  $4.5 \pm 1\%$  to  $2.8 \pm 1\%$  ( $p < 0.05$ ). Two patients stopped urea after one year and developed symptomatic hyponatremia.

**Conclusion:** These preliminary data shows that urea appears to be an effective therapeutic approach for the polydipsia — hyponatremia syndrome.