

The prevalence of lithium-induced uremia- presenting a Swedish registry study

Hans Bendz MD PhD¹, Staffan Schön MD², Mattias Aurell, MD PhD³

1) Lund University

2) The Swedish Registry for the Active treatment of Uremia in Skövde

3) Göteborg University; Sweden

Background: Lithium has been in clinical use for the treatment of bipolar disorders for more than 50 years. Still, scientific data do not permit a satisfactory assessment of the risk of serious renal damage from the treatment.

The main purpose of our study is to investigate the association between lithium treatment and uremia. We also want to assess the prevalence of uremia and pre-uremia among lithium patients in Sweden, and the prevalence of lithium treatment among uremia patients.

Material and Methods: The study is intended to cover all of Sweden (9 million inhabitants). We will make use of two registers.

1) The Swedish Registry for the Active treatment of Uremia (SRAU). It was founded in 1991, includes all dialysis centres in Sweden, and covers more than 95% of all uremia patients.

2) A register of all lithium patients in Sweden, created by ourselves.

In addition we will count the total number of psychiatric patients in Sweden.

We will send enquiries to all dialysis centres, all uremia patients, all psychiatric clinics, and all private psychiatrists. The data thus collected concern the total number of uremia patients, psychiatric patients, and lithium patients in Sweden. We will match SRAU and our register of lithium patients with each other, and with a national register, dating back to 1973, of all psychiatric in-patients with a discharge diagnosis of bipolar disorder, cycloid psychosis, schizoaffective disorder or cyclothymia.

Uremia patients who are presently on lithium or have been in the past, will be analysed in detail, including a search for data in their somatic and psychiatric charts. Based on all available data, the project group will estimate the probability of a causal association (low, medium, high) between one hand the lithium treatment or any other possible etiology, on the other the renal disorder. Our data will also permit the calculation of the prevalence of uremia pre-uremia among all psychiatric patients, and among all lithium patients. These prevalences will be compared to each other and to the general population.

Present status of the study: The study was launched on January 10, 2005. Our first focus is Skåne (Scania) in southern Sweden. (population about 1 million). Enquiries have been mailed.

Importance of the study: The data generated by the study are likely to affect the safety routines of the treatment. A reliable estimate of the risk of serious renal damage from lithium treatment will be of importance for cost-benefit analyses.