

# **CLINICAL EPIDEMIOLOGICAL PROFILE OF INTOXICATIONS REPORTED BY A POISON CONTROL CENTER INVOLVING CHRONIC LITHIUM USE FROM 2019 TO 2024**

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**INTRODUCTION:** Lithium is a mood stabilizer especially recommended for its effects in the treatment and prevention of depressive episodes in Bipolar Affective Disorder. Although the clinical efficacy of lithium is well documented, its narrow therapeutic window makes for a therapeutic challenge, and lithium intoxications are potentially toxic and can be fatal. **AIM:** To assess the clinical-epidemiological profile of lithium intoxications in patients under therapeutic use of the drug in the records of the Santa Catarina Toxicological Information and Assistance Center (CIATox/SC) between 2019 and 2024. **METHODS:** This is a quantitative, observational, and cross-sectional study that uses the analysis of data from patient records in the DATATOX computerized system. **RESULTS AND CONCLUSIONS:** Overall, 295 records were recovered, which were distributed in a crescent pattern between the years. Most cases (69.83%) were from the central region near Florianópolis. The female gender was more prevalent (68.47%), and the age range of 40 to 79 years represented 82.71% of cases (n=244). The main category of symptoms presented by patients was neuro/psychiatric/muscular (28.16%), and the main symptoms reported within this category were altered level of consciousness (10.74%), tremor (12.03%), mental confusion (5.59%), lethargy (4.40%) and drowsiness (3.87%). Renal insufficiency (3.54%), diarrhea (5.05%), and vomiting (4.62%) were also reported as symptoms, although those could also be construed as possible reasons as to why the intoxication took place. A significant percentage of patients required hospitalization time (61.69%), and the mean time of hospitalization for those patients was 6.95 days (IC 95%  $\pm$  1.16). Across the years searched 105 (35.59%) cases were labelled mild, 60 (20.34%) were moderate, 40 (13.56%) were severe, and 16 (5.42%) were fatal. Thus, it is apparent that lithium intoxication poses an important public health concern with a relevant morbidity factor, and better strategies for screening patients on the medication need to be employed to prevent intoxications and negative outcomes for patients.

**Keywords:** Lithium; Intoxication; Therapeutic Monitoring; Chronic Use.