

LITHIUM LEVEL IN THE PROSTATE OF THE NORMAL HUMAN: A SYSTEMATIC REVIEW

V. Zaichick

*Medical Radiological Research Centre, Korolyev St., 4, Obninsk, 249036, Russia,
e-mail: vzaichick@gmail.com*

Knowledge of the etiology and pathogenesis of most prostate malfunctions and pathologies is very limited. Despite advances in medicine, the differential diagnosis of benign hypertrophic and carcinogenic prostate has steadily increased in complexity and controversy. It has been suggested that the prostate lithium (Li) level may help solve these problems related to prostate disorders, especially as an indicator of prostate cancer risk, as an elevated Li level in the prostate may be a sign of prostate cancer in the future. These suggestions promoted more detailed studies of the Li level in the prostate of healthy men.

In present review we analyze data published concerning Li prostatic levels in healthy persons. In all 2312 items in the literature of the years dating back to 1921 were identified in the following databases: PubMed, Scopus, Web of Science, the Cochrane Library, and ELSEVIER-EMBASE. This data was subject to an analysis employing both the “range” and “median” of means.

In this way the disparate nature of published Li content of normal prostates was evaluated. Of the articles examined, 23 were selected for objective analysis of data from 1190 healthy subjects. The contents of prostatic Li (on a wet mass basis) spanned the interval from 0.0053 mg/kg to 0.0200 mg/kg with 0.0074 mg/kg as median for their means.

The data included a wide range of values and the samples were small, hence it is advisable that further studies with strong quality control of results be performed.