Thyroid hormone replacement undertreatment linked to worse hospital outcomes
26 April 2022

"We found that those patients who were undertreated with thyroid hormone, even weeks or months prior to hospital admission, had worse hospital outcomes than those without hypothyroidism," said Ettleson. "This has not been shown previously."

The study included 43,478 patients from a large, U.S.-based patient claims database. Of these patients, 8,873 had hypothyroidism. The researchers divided patients into four groups based on their levels of thyroid stimulating hormone (TSH). Low levels of TSH indicate a patient has been overtreated for their thyroid disease, while high levels of TSH correspond to undertreatment.

Patients with a high TSH level before hospitalization had a length of stay that was 1.2 days longer, a 49% higher risk of 30-day readmission, and a 43% higher rate of 90-day readmission compared with patients without hypothyroidism.

Those with a normal TSH level before hospitalization had a decreased risk of dying in the hospital and decreased 90-day readmission rate compared to patients without hypothyroidism.

"The results suggest that suboptimal treatment of hypothyroidism is associated with worse hospital outcomes," Ettleson said. "It is important for both patients and physicians to know that maintaining optimal thyroid hormone replacement is important to minimize length of hospital stays and hospital readmission. It is particularly important for planned admissions where thyroid hormone replacement can be adjusted if needed prior to admission."

Other authors of this study are Antonio C. Bianco, Wen Wan and Neda Laiteerapong of the University of Chicago in Chicago, Ill.
doi.org/10.1210/clinem/dgac215

Provided by The Endocrine Society

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.