

Ebrahimi F et al. Excess Mortality Among Hospitalized Patients With Hypopituitarism-A Population-Based, Matched-Cohort Study. J Clin Endocrinol Metab. 2020;105(11): e3910-8. doi: 10.1210/clinem/dgaa517.

CONTEXT: Patients with hypopituitarism face excess mortality in the long-term outpatient setting. However, associations of pituitary dysfunction with outcomes in acutely hospitalized patients are lacking.

OBJECTIVE: The objective of this work is to assess clinical outcomes of hospitalized patients with hypopituitarism with or without diabetes insipidus (DI).

DESIGN, SETTING, AND PATIENTS: In this population-based, matched-cohort study from 2012 to 2017, hospitalized adult patients with a history of hypopituitarism were 1:1 propensity score-matched with a general medical inpatient cohort.

MAIN OUTCOME MEASURES: The primary outcome was in-hospital mortality. Secondary outcomes included all-cause readmission rates within 30 days and 1 year, intensive care unit (ICU) admission rates, and length of hospital stay.

RESULTS: After matching, 6764 cases were included in the study. In total, 3382 patients had hypopituitarism and of those 807 (24%) suffered from DI. All-cause in-hospital mortality occurred in 198 (5.9%) of patients with hypopituitarism and in 164 (4.9%) of matched controls (odds ratio [OR] 1.32, [95% CI, 1.06-1.65], $P = .013$). Increased mortality was primarily observed in patients with DI (OR 3.69 [95% CI, 2.44-5.58], $P < .001$). Patients with hypopituitarism had higher ICU admissions (OR 1.50 [95% CI, 1.30-1.74], $P < .001$), and faced a 2.4-day prolonged length of hospitalization (95% CI, 1.94-2.95, $P < .001$) compared to matched controls. Risk of 30-day (OR 1.31 [95% CI, 1.13-1.51], $P < .001$) and 1-year readmission (OR 1.29 [95% CI, 1.17-1.42], $P < .001$) was higher among patients with hypopituitarism as compared with medical controls.

CONCLUSIONS: Patients with hypopituitarism are highly vulnerable once hospitalized for acute medical conditions with increased risk of mortality and adverse clinical outcomes. This was most pronounced among those with DI.