

Delayed Symptomatic Hyponatremia Epidemiology

Delayed [hyponatremia](#) following [transsphenoidal surgery](#) is a known [complication](#), with a peak incidence of 4-7 days post-operatively ^{1) 2) 3)}.

It is a common cause of [hospital readmission](#), due to fluid retention resulting in reduction of plasma [sodium](#) concentration below physiologic levels ⁴⁾.

In a database of 466 consecutive patients who underwent endoscopic transsphenoidal surgery at a tertiary care center between April 2006 and July 2014 was reviewed for 30-day causes for readmission, length of stay, level of care required, and average cost.

Twenty-nine readmissions were identified within the study period, indicating a 30-day readmission rate of 6.2%. Among all patients, rates of 30-day readmission were 2.1% for epistaxis, 1.5% for hyponatremia, 0.9% for cerebrospinal fluid leak, and 1.7% for other medical conditions. Average cost per readmission ranged from \$6011 for hyponatremia to \$24,613 for cerebrospinal fluid leak ⁵⁾.

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Kelly DF, Laws ER, Jr., Fossett D. Delayed hyponatremia after transsphenoidal surgery for pituitary neuroendocrine tumor. Report of nine cases. J Neurosurg. 1995;83(2):363-367.

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