

In conclusion, these findings in hospitalized patients with cirrhosis and OHE reveal no apparent relationship between serum ammonia levels and OHE severity or time to OHE resolution. Although these analyses were limited by the small number of patients included who had ammonia levels tested on day 1, the findings are consistent with data suggesting no relationship between baseline ammonia levels and time to resolution of OHE. The extension of this finding to the setting of a randomized controlled trial further supports the lack of utility for ammonia as a diagnostic tool in OHE.² These data, along with evidence that ammonia testing has been shown to have low diagnostic accuracy in patients with cirrhosis and OHE,⁸ warrant implementation of educational initiatives and/or tools that address and mitigate the overutilization of ammonia testing in select clinical settings.³

The value of serum ammonia levels in providing information that changes the clinical management of hepatic encephalopathy has been disputed, with evidence showing ammonia levels do not change the dose of lactulose prescribed by front-line clinicians.^{7,8} Furthermore, the ammonia level itself correlates poorly with a grade of hepatic encephalopathy,⁹ as not all patients demonstrate a significantly elevated serum ammonia and others without encephalopathy demonstrate a raised serum ammonia, so the test result may distract from a thorough clinical evaluation of other causes of an altered mental state.^{5,10} Con-

RESULTS:

One thousand two hundred two admissions with HE were identified. Ammonia levels were drawn in 551 (46%) patients; 328 patients (60%) had an abnormal ammonia level (>72 $\mu\text{mol/L}$). There were no significant differences in the Child-Pugh score, MELD, or Charlson Comorbidity Index in those with and without ammonia levels drawn. The average total lactulose dose over 48 hours was 167 and 171 mL in the no ammonia vs ammonia groups, respectively ($P = 0.42$). The average lactulose dose in patients with an elevated ammonia level was 161 mL, identical to the lactulose dose in patients with a normal ammonia level. There was no correlation between lactulose dose and ammonia level ($R^2 = 0.0026$).

DISCUSSION:

Inpatient management of HE with lactulose was not influenced by either the presence or level of ammonia level, suggesting that ammonia levels do not guide therapy in clinical practice.

encephalopathy (HE). Many physicians utilize serum ammonia to diagnose, assess severity, and determine the resolution of HE in patients with chronic liver disease (CLD) despite research showing that ammonia levels are unhelpful in all of these clinical circumstances. HE in patients with CLD is a clinical diagnosis of exclusion that should not be based on ammonia levels.