

## **IVF for treatment of acute alcoholic intoxication prolonged ED length of stay even after adjustment for potential confounders. Patients given IVF for acute alcohol intoxication should be selected with care” Homma et al (2018).**

### Abstract:

**Objectives:** Acute alcohol intoxication is often treated in emergency departments by intravenous crystalloid fluid (IVF), but it is not clear that this shortens the time to achieving sobriety. The study aim was to investigate the association of IVF infusion and length of stay in the ED.

**Methods:** This single-center retrospective cohort study was conducted in Japan and included patients aged  $\geq 20$  years of age and treated for acute alcohol intoxication without or with IVF. The primary outcome was the length of the ED stay and the treatments were compared by time-to-event analysis.

**Results:** A total of 106 patients, 42 treated without IVF and 64 with IVF. The baseline characteristics of the two groups were similar. Kaplan-Meier analysis and the generalized Wilcoxon test found no significant difference between the two treatments in the time to ED discharge. The median time was 189 (IQR 160-230) minutes without IVF and 254.5 (203-267 minutes with IVF;  $p = 0.052$ ). A Cox proportional hazards regression model adjusted for potential confounding variables found that patients treated with IVF were less likely to be discharged earlier than those treated without IVF (HR 0.54, 95% CI: 0.35-0.84,  $p = 0.006$ ).

**Conclusions:** IVF for treatment of acute alcoholic intoxication prolonged ED length of stay even after adjustment for potential confounders. Patients given IVF for acute alcohol intoxication should be selected with care.

### Reference:

Homma, Y., Shiga, T., Hoshina, Y., Numata, K., Mizobe, M., Nakashima, Y., Takahashi, J.,



Inoue, T., Takahashi, O. and Funakoshi, H. (2018) IV crystalloid fluid for acute alcoholic intoxication prolongs ED length of stay. *The American journal of Emergency Medicine*. 36(4), p.673-676.

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