Introduction:
Alcohol use disorders (AUDs) is very common in ICU patients (up to 20%). An unplanned and brutal stop of alcohol consumption, as it can occur during ICU admission, may lead to an alcohol withdrawal syndrome (AWS). The most severe clinical manifestation of AWS is described as delirium tremens (DT). There are no current guidelines available for AWS treatment in ICU. The study’s aim was to describe the clinician’s practices for DT treatment and the outcome of DT in ICU patients.

Methods:
Observational retrospective cohort study in two ICUs of a university-affiliated, community hospital in France. Patient diagnosed for DT during their ICU stay, as defined by DSM-V classification, were enrolled in the study.

Results:
61 patients with DT were included between 2014 and 2017. Benzodiazepines was administered to 23% of the patients in order to prevent an AWS. As associated measures, vitamin therapy was administered to 83% of the patients and 59% had an increased fluid intake (mean 2.5L +/- 0.7).
Concerning the curative approach of AWS, the treatment’s heterogeneity was notable. There was a high frequency of treatment’s association (66% of the patients), every patient had benzodiazepines and the use of second line treatments such as neuroleptic, alpha-2 agonist, propofol was variable (Figure 1).
Complications of DT were the following:

1. Need for mechanical ventilation due to unmanageable agitation or acute respiratory distress (33% of the patients)
2. Self inflicted injuries such as pulling out of central lines, tubes, surgical drain (46%)
3. Falls (7%).
4. Seizures (33%).

Conclusion:
Delirium tremens is a severe complication of an untreated AWS, which can lead to serious adverse events in ICU. The current lack of evidence concerning the management of AWS in ICU probably explains the heterogeneity of treatments. Given the potential severity of AWS in ICU, further evidences are required to optimize care of AWS in ICU patients.

Image:

Figure 1: DT treatment in ICU from D0 to D5. Most of the patients presenting a DT during their ICU stay were treated with benzodiazepine. A significant number of them received association of different molecules regardless the absence of evidence in the literature.