Atypical antipsychotics for intensive care unit delirium at a community hospital
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OBJECTIVE: Intensive care unit delirium (ICU-D) presents as a result of stress and neurotransmitter changes. It is estimated around 50% of intensive care unit (ICU) patients experience ICU-D. ICU-D is associated with increased mortality, higher treatment costs, and potentially long-term cognitive dysfunction. Atypical antipsychotics frequently utilized for treatment of ICU-D are often continued upon transfer from the ICU. The purpose of this study was to investigate antipsychotic prescribing methods for ICU-D at a community hospital.

METHODS: This observational, single-centered, retrospective study reviewed patients over a sixteen-month period. Searches were conducted using clinical surveillance software for patients with orders for olanzapine, quetiapine, risperidone, or ziprasidone. Patients were included if at least eighteen years of age, admitted to an ICU within the hospital system, and if they received at least two doses of an atypical antipsychotic or at least one dose of an atypical antipsychotic with at least one dose of haloperidol. Patients were excluded if pregnant, in alcohol or drug withdrawal, on antipsychotic medication prior to hospitalization, if psychiatry was consulted, or if ordered antipsychotic was for an indication other than ICU-D.

RESULTS: A total of 462 patients were reviewed across 3 facility ICUs. Of the 462 patients reviewed, 37 patients met inclusion criteria. Patients were divided into ICU survivors and non-survivors. Of the 37 patients included, 5 patients (13.5%) experienced mortality while in the ICU. There were 32 patients included for transitions of care measures.

The primary outcome of this study was frequency of antipsychotic order continuation upon transfer to a stepdown or medical unit. From the 32 ICU survivors, 5 patients (15.6%) were directly discharged from the ICU, and 27 patients (84.4%) were transferred to a stepdown unit prior to hospital discharge. Of the 27 patients transferred to a stepdown unit, 19 patients (70.3%) had an order for an atypical antipsychotic continued. A total of 9 patients were discharged with an antipsychotic (28.1%). Of the patients discharged with an antipsychotic, all 9 were prescribed quetiapine (100%).

From the total ICU survivor and non-survivor population, a total of 28 (75.7%) were over the age of 65. A total of 24 patients (64.9%) received concomitant haloperidol while in the ICU. An average patient received 11.4 doses of antipsychotics (including haloperidol doses) while in the ICU. A total of 10 patients (27%) had QTc value of >500 milliseconds while in the ICU. No patients were noted to experience extrapyramidal symptoms or tardive dyskinesia.

CONCLUSION: This retrospective study illustrates transitions of care opportunities as patients transfer from the ICU after experiencing ICU-D. Although the patient population included was limited, many patients with an antipsychotic started for delirium in the ICU continued this upon transfer to a stepdown unit and at discharge. This study may indicate an area of medical care where pharmacists may be able to make interventions to help protect patients from unnecessary long-term antipsychotic use.