

ARDS, delirium and antipsychotic use reviewed



Acute respiratory distress syndrome (ARDS) often requires prolonged and complicated hospital courses putting patients at risk for intensive care unit (ICU) delirium. Antipsychotics are prescribed to decrease the severity and duration of ICU delirium; however, these drugs are associated with many adverse effects including respiratory failure.

"Given the long-term sequelae associated with the development of ICU delirium and the risks associated with antipsychotic use, clinicians must weigh the risks and benefits of antipsychotic use," Heather Torbic, Pharm.D, BCCCP, BCPS (Department of Pharmacy) and Abhijit Duggal (Department of Critical Care, Respiratory Institute) of the Cleveland Clinic, write in a review paper to appear in the journal Pharmacotherapy.

The paper discusses the interrelationship between ARDS, delirium, and antipsychotic use. ARDS is an acute inflammatory process that impairs the ability of the lungs to oxygenate and ultimately leads to respiratory failure. Mortality in ARDS patients remains high with reported mortality rates ranging from 25%-46% based on the severity of initial hypoxaemia.

In addition to mortality, ARDS has been associated with detrimental long-term effects including cognitive impairment, memory loss, and mood disturbances, such as post-traumatic stress disorder (PTSD), depression, and anxiety. Since these neuro-behavioural problems are closely associated with delirium during the acute phase of the illness, preventing delirium is an extremely important aspect in the care of patients with ARDS, the paper explains.

There are many detrimental effects associated with ICU delirium including adverse physical and cognitive sequelae and even death. Patients who develop delirium have a hospital length of stay approximately 10 days longer than those patients who do not develop delirium, and ICU delirium is independently associated with a 3.2-fold increase in six-month mortality.

"Patients should be carefully screened for ICU delirium because hyperactive and hypoactive delirium do not often occur in isolation, and hypoactive delirium is associated with more detrimental outcomes. Prevention strategies and early recognition and intervention are vital in reducing the morbidity and mortality associated with both ARDS and ICU delirium," Torbic and Duggal point out.

Antipsychotics have been shown to decrease the severity and duration of ICU delirium. Unfortunately, antipsychotics are associated with serious adverse effects including respiratory failure. To date, the authors note, the use of antipsychotics for the prevention of delirium in patients with ARDS has not been studied. Given the lack of data and known risks associated with antipsychotics, the Society of Critical Care Medicine (SCCM) does not recommend the initiation of pharmacologic delirium prevention.

"Given the long-term sequelae associated with the development of ICU delirium, the benefit of antipsychotics for short-term use in the ICU likely outweighs the risk and should be a part of a multimodal treatment plan to manage ICU delirium," the authors say. "Clinicians should judiciously prescribe antipsychotics to ICU patients with ARDS to hasten their recovery from ICU delirium. The lowest possible clinically effective dose should be prescribed."

The paper also highlights the need for further studies to critically evaluate antipsychotic timing, dose, and duration for the prevention and treatment of ICU delirium and specifically evaluate impact in special populations, particularly patients with ARDS.

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