Georgian Scientists
ქართველი მეცნიერები
Vol. 8 Issue 4(1), 2026
https://doi.org/10.52340/gs.2026.08.04(1).71



DELIRIUM IN THE ICU: PREVALENCE, RISK FACTORS AND CLINICAL OUTCOMES

Jano Oniani[1], Mohammed Ali[2], Marco Cascella[3]

[1]First University Clinic, TSMU, Tbilisi, Georgia.
[2]Corpus Christi Medical Center (Corpus Christi, Texas, USA)
[3]Istituto Nazionale Tumori - IRCCS - Fondazione Pascale (Naples, Italy)

Delirium is a common yet underdiagnosed form of acute brain dysfunction occurring in critically ill patients admitted to the intensive care unit (ICU). It is characterized by an acute onset of cognitive impairment, altered mental status, and fluctuating attention. Delirium is strongly associated with increased short- and long-term mortality, prolonged mechanical ventilation, extended ICU and hospital stay, and persistent post-discharge cognitive decline. The aim of this study is to evaluate the incidence of delirium in ICU patients, identify major modifiable and non-modifiable risk factors, and assess the clinical impact of routine screening protocols.

A comprehensive literature review was conducted to evaluate the global incidence of delirium in ICU patients. International screening protocols using the Confusion Assessment Method for the Intensive Care Unit (CAM-ICU) were analyzed. Demographic data, severity of illness scores, mechanical ventilation duration, exposure to sedative agents (particularly benzodiazepines and opioids), and environmental variables such as sleep deprivation were analyzed as potential risk factors.

The results demonstrated a high prevalence of delirium among ICU patients, with hypoactive delirium being the most frequent and frequently undetected subtype. Prolonged use of deep sedation and invasive mechanical ventilation were identified as significant modifiable risk factors. Patients who developed delirium experienced a statistically significant increase in ICU length of stay and higher rates of post-ICU cognitive complications compared to non-delirious patients.

In conclusion, delirium remains a major critical care challenge with profound clinical consequences. Standardized daily screening using tools like the CAM-ICU, combined with light sedation protocols, early mobilization, and non-pharmacological interventions, is essential for early recognition, prevention, and improving patient outcomes.

Keywords: Delirium, Intensive care unit, CAM-ICU, Risk factors, Prevention.