

## Complication of Covid 19 infection - delirium in dementia in patients hospitalized at the Military Covid Hospital

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### ABSTRACT

**Introduction:** COVID-19 infection in patients with dementia may be atypically manifested by delirium. The epidemic of SARS (Severe Acute Respiratory Syndrome) in 2003. pointed to the fact that patients with comorbid dementia experienced not only respiratory and infectious symptoms, but also symptoms of delirium. Treatment of delirium in COVID-19 is limited due to the infection symptoms severity and further complicated by biological limitations related to patients advanced age. That being said, identification of delirium is necessary in order to stratify risk, identify early interventions, and improved treatment outcomes.

**Aim of the study:** The aim was to show the prevalence of delirium in patients with dementia and confirmed COVID-19 infection, in patients hospitalized at the Military Covid Hospital Karaburma.

**Method:** A retrospective study was performed, analyzing the medical history of elderly adults (> 65 years) with COVID-19 infection, with a previously confirmed diagnosis of dementia, treated in hospital from November 2020. to June 2021. Delirium was the primary outcome and clinical criteria of psychomotor subtypes, hyperactive type (agitation, psychomotor restlessness, hallucinations and disorientation), hypoactive type (sedation, bradykinesia, lethargy and withdrawal reaction) and mixed hyperactivity and hyperactive type were used to characterize delirium subtypes). We also conducted a systematic review of articles published on PubMed from the beginning of the pandemic until March 2022.

**Results:** We treated a total of 78 patients diagnosed with dementia, while delirium was identified in 49 (67%) patients, with a mean duration of 8 (3-15) days. Patients with delirium were more frequently women, 29 (59%). Around 80 papers were found on PubMed, 6 of which were meta-analyzes. The prevalence of delirium in confirmed COVID-19 infection in patients with dementia was 20-50% in clinical wards, while in Intensive Care Units (ICU) it was up to 60-80%.

**Conclusion:** Dementia, as well as the advanced age of patients, have been identified as primary risk factors for delirium in patients with COVID-19. Delirium is a poor prognostic sign and precedes disease progression with need for oxygen support and

mechanical ventilation, so the role of an experienced psychiatrist is of paramount importance in team approach to the prevention, diagnosis and treatment of delirium.

Keywords: COVID 19; dementia; delirium.